DOCUMENTED BRIEFING

RAND

Quadrennial Defense Review (QDR) Analysis

A Retrospective Look at Joint Staff Participation

John Y. Schrader, Leslie Lewis,
Roger Allen Brown

National Defense Research Institute

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Prepared for the Joint Staff

DB-236-JS

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PREFACE

This documented briefing summarizes a review of Joint Staff participation in the Quadrennial Defense Review (QDR) from the summer of 1996 through the spring of 1997. It is intended to identify lessons learned for subsequent defense reviews and to identify analytic tools that may be required in the future. To enhance candor and to uncover perceived and real problems, the research relied heavily on "not-for-attribution" interviews with participants in the QDR activities.

This research will be of interest to the Joint Staff, the military services, and the Office of the Secretary of Defense (OSD), as well as other professionals interested in defense management processes.

This research was conducted for the Director for Force Structure, Resources, and Assessment (J-8) within the International Security and Defense Policy Center of RAND's National Defense Research Institute, a federally funded research and development center sponsored by the OSD, the Joint Staff, the Unified Commands, and the defense agencies.

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SUMMARY

The 1996 QDR sought to bring together various organizations and functional entities in the Pentagon and military to evaluate the state of the U.S. military in a coordinated and interconnected way. This study presents RAND's analysis of the Joint Staff's participation in the QDR. Its purpose is to provide a set of lessons learned for future reviews and to emphasize the need for a set of effective analytic tools with which to carry out these processes. One of the most crucial recommendations is the need for the Joint Staff to increase its involvement and improve its position as an "integrator" during the course of the review process. As this study shows, the desired emphasis on integration of processes and organizations was not successful. For a variety of reasons, primarily the lack of external pressure for a serious review, the QDR did little to change the status quo.

Congressional legislation required the QDR to address the following 12 issues:

- the results of the review, including U.S. defense strategy and the force structure best suited to implement it

- the threats examined and the scenarios developed to examine them

- the assumptions used in the review

- the effect on the force structure of preparing for and participation in peace operations and military operations other than war

- the effects on the force structure of technological advancements

- the manpower and sustainment necessary for conflicts longer than 120 days

- the anticipated roles and missions of the reserve components

- the appropriate ratio of combat to support forces (the "tooth-to-tail" ratio)

- the airlift and sealift required to support the defense strategy

- the forward presence, prepositioning, and other anticipatory deployments needed for deterrence and for adequate response to anticipated conflicts

- the extent of resource shifting among theaters in the event of conflict

- The advisability of revisions to the Unified Command Plan.

The Joint Staff planned to examine most of these issues.

The structure the J-8 put forth was based on the supply and demand model, where capabilities are "supplied" by the services and defense agencies to fulfill the "demands" of the operational commanders. The above table was later used to assess how well the QDR did in answering these questions. The organizing framework for the QDR was based on the eight missions of the combatant commanders:

- Deter and defeat attacks on the U.S.

- Deter and defeat aggression against friends and allies

- Protect the lives of U.S. citizens in foreign locations

- Underwrite and foster regional stability

- Counter regional threats from weapons of mass destruction

- Deter and counter terrorism

- Provide humanitarian and disaster relief

- Counter production and trafficking in illegal drugs.

However, many issues in the review were only indirectly related to operational matters and instead focused on the institutional responsibilities. As a result, the planning framework was expanded from its operational focus to include eight functional objectives:

- Personnel management

- Training

- Acquisition

- Installation management

- Sustaining forces

- Organizing forces

- Command, control, communications, and intelligence development

- Medical care.

RAND's approach to this study consisted of providing analytic support to the QDR Support Team; analysis of briefings given to the Joint Chiefs of

Staff, commanders-in-chief (CINCs) of the Unified Commands and the Secretary of Defense; and nonattribution interviews with participants in the QDR process. RAND proceeded to look at the various analytic approaches and tools and evaluated their effectiveness in the review process.

Phases of the QDR

	Startup	Preelection	Engagement	Endgame
Principal Activity	Ongoing studies: DAWMS, CSEEA, JSR	Joint Staff and services conduct stovepipe analyses	Major effort to structure issues within subgroups	Need for decisions resulted in development of options by OSD staff
Control Agent	OSD/JS planning for integrated, open process	JS with little OSD leadership	OSD leadership engaged but process unsuited for integration and tradeoffs	OSD control; escalation of activity from working level to Senior Steering Group
Service Activity	Wait and see	Stand up support organizations; participate at working level	Leadership involvement; bought into $15B shortfall; movement of issues to JROC	JROC collaboration with JCS to regain focus

Sep 96 Dec 96 Apr 97

From the very outset, the planned flow of the QDR process at the Department of Defense (DoD), with emphasis on integration among various participating task groups faced problems. This slide presents an overview of QDR activities showing the important phases of the QDR, principal activities, leadership, and the role of the services.

The 1996 presidential elections limited the effectiveness of the integrative working structure because the administration at the time did not want to constrain the choices of a possible successor or threaten specific programs or interests. The elections also prevented the OSD staff from providing direction to the process because of the volatility of certain issues, some of which they feared would become election issues. After the elections, the OSD staff did attempt to assert control over the process, but the lack of early integration among the various activities made this difficult. Moreover, such realities as the interdependencies among various activities (e.g. changes in force structure require changes in infrastructure) and the lack of integration created problems that undermined the effectiveness of the individual task forces. Another complicating factor was the relationship among the Joint Staff, OSD, and the services.

The Joint Staff's role and activities during the course of the process also contributed to the relatively modest changes from the QDR. Already resistant to any significant change in force structure and readiness, the

Joint Staff, from the beginning, put emphasis on analyzing how U.S. forces had been engaged in recent years and how these operations affected our ability to conduct a major theater war. This modus operandi, along with other factors, contributed to supporting a force structure like the current one to meet the demands of the current environment and urging caution in implementing any radical change. Also contributing to this result were the conclusions generated by the Dynamic Commitment games. The games were noteworthy because they revealed the limitations of our current analytic "tools" for force structure analysis and the need for a better "toolbox" of models and techniques to tackle the questions of "how much is enough" for contingencies.

The QDR organization began with five functional task groups that brought together organizations and individuals with common interests into a "stovepipe" that limited consideration of issues that might require cross-panel analysis. The first task group concentrated on the strategy issue. In this area, the QDR did succeed in building consensus on demand for non–major regional conflict (MRC) missions. The shift to a broader focus of analysis was made possible by the assessment put forth by the Joint Strategy Review and the realization that the Bottom-Up Review focused too narrowly on MRCs. Therefore, requirements for engagement and small-scale contingencies were incorporated into the strategy debate. Even though this debate resulted in the review of a full spectrum of capabilities, it did not address any future strategy issues or options and was little more than a consensus-building exercise.

The second panel was charged with reviewing infrastructure. This issue was to be a major failure of the QDR for a variety of reasons. Among them were the Defense Science Board's unrealistic suggestions for $30 billion in potential savings, special-interest activity in the services, and the lack of experience on the part of the Joint Staff and in the Joint Warfighting Capabilities Assessment (JWCA) process on infrastructure issues other than logistics. The lack of leadership and control from OSD also contributed to failure in this area and resulted in the creation of a series of subgroupings and special interests within the panel that prevented any uniformity of analysis and output. Participants also lacked a clear understanding of infrastructure itself, viewing it as billpayer for other programs (specifically modernization) instead of a combat "enabler" (logistics) and "restrictor" (using up limited resources that could potentially constrain combat effectiveness).

The Joint Staff was better prepared for the panel on modernization because of the presence of a well-developed knowledge base on the capabilities and costs of modernization. However, the absence of a mechanism to force the production of options and the lack of linkage

between new capabilities and strategy and emerging joint operational concepts to utilize new systems resulted in advocacy for different programs without detailed consideration of alternatives and costs. Consequently, OSD Program Assessment and Evaluation (PA&E) was forced to generate options with little or no input from the modernization panel, options that PA&E leadership later rejected.

The force structure debate was also a disappointment. Essentially, the services, being very protective of their forces, believed that the current environment justified their present structures. Moreover, the lack of new joint operational concepts provided no incentive for real change and merely resulted in some minor cost-saving initiatives. With the major organizational decisions left up to the individual services, the Joint Staff failed to provide a forum to assess the capabilities of the individual services in a joint context, an issue that it will have to address in future reviews.

The last major panel focused on readiness and was viewed as a success story for the QDR, despite OSD's attempts to create savings in this category. The major finding in this panel was the validation of "service-unique" approaches to readiness (based on a review of the tiered and rotational readiness options) and the decision not to institute a standardized methodology. Furthermore, the QDR brought to light the important trends of recruiting and retention difficulties and provided a basis on which to better assess the "health" of the force by monitoring the effects of frequent deployments and changing operational tempo. This was exemplified by the creation of the Joint Military Readiness Report to better evaluate capabilities.

The study then focused on the different perspectives of the individual services. These perspectives are characterized in terms of (a) how well capabilities were represented, (b) the openness of the process, and (c) the satisfaction with the results. In an overall sense, the QDR was viewed in several ways. Among these views was the one that the review was essentially a "resource drill," despite the apparent emphasis on strategy considerations. Second, the services saw the QDR as an exercise with little hope for gain and a high risk for loss. Finally, the openness that was encouraged at the outset of the review was, in fact, counterproductive because the lower-level representatives that participated in the QDR did not have the authority to commit their leaders to any decisions, let alone any major ones. Future reviews must take into account the natural tendency of the services to be protective of their forces and structure and strive to work within a framework acceptable to all services.

Outsider response to the QDR was mixed, since neither those who supported significant increases in defense spending nor those who expected significant changes were satisfied. The National Defense Panel, commissioned by Congress to examine the QDR, criticized the report for not putting enough emphasis on long-term analysis, but did acknowledge it as another step in the ongoing process of moving away from the Cold War.

As part of RAND's work for the J-8, an organizational framework was developed to assist in the integration of issues that would arise in the JWCA–Joint Requirements Oversight Council (JROC) process. The purpose of this framework, the Objectives-Based Resource Management (OBRM), was to list all the capabilities the CINCs demand to allow a grouping of similar program issues. The QDR Support Team originally envisioned using the OBRM as a tool for supporting issue integration in the QDR, which did not occur. However, the OBRM is valuable in the sense that it could be used for follow-on analysis and to link issues to the integrative framework. During this analysis, it became clear that the OBRM was not adequate to cover the wide range of related nonoperational issues in the QDR. In particular, a list of eight "major" activities related to functions assigned to the services and defense agencies was added to represent these issues. The purpose of this approach was to bring to light issues that were either not analyzed properly or not analyzed thoroughly in the context of the QDR.

Post-QDR Scorecard

Congressional Questions	Extent of Review	Focus	Comments
Threats and Scenarios	Focus on low end	Near-term	Definitions have changed
Assumptions	Narrow	Near-term	Very conservative
Strategy and Force Structure	Broad	Near-term	Little insight for future forces
MOOTW and Peace Operations	Broad	Near-term	Didn't address how well we do
Technology Advancements	Narrow	Mid-term	Limited linkage to force structure
> 120 Day Conflicts	Narrow	Near-term	ARNG availability and effectiveness?
Reserves	Very Narrow	Near-term	ARNG equipping bills?
Tooth to Tail	Comprehensive	Near-term	Major decisions deferred
Airlift and Sealift	Narrow	Mid-term	Need to revisit MRS-BURU
Forward Presence, PREPO, Deployed Force	Broad	Mid-term	
Resources Must Be Shifted Between Theaters	Narrow	Near-term	Little change from BUR
Revisions to the UCP	Narrow		Not seriously addressed
Our Questions (Joint Staff)			
Infrastructure	Comprehensive	Near-term	Major decisions deferred

Key: Broad—Extensive
Comprehensive—Full range of issues
Narrow—Limited focus

Timeline: Near-term-Current FYDP; Mid-term-FYDP + 5 yrs; Far-term-2010 & beyond

One area related to the congressional questions, full spectrum of operations from forward presence to major theater wars, was discussed very extensively in the QDR. On the other hand, areas that did not receive detailed treatment were reserve forces and their role in overall strategy, infrastructure, and focus on the long-term (a task relegated to the National Defense Panel). The question of changes to the Unified Command Plan was never addressed. The scorecard shown in the slide summarizes the way each of the questions and major issues was examined.

As a result of its analysis, the RAND support team came up with the following overall findings. First, the QDR provided answers to short-term problems and created a basis for developing longer-term solutions to growing fiscal worries. The short-term focus was demonstrated in the adjustments made to fighter procurement in the Future Years Defense Program (FYDP), leaving the issue of an outyear funding bow wave unresolved.[1] The QDR was also successful at outlining the missions our forces are expected to carry out, but there was no debate on "how" to perform them. With the development of joint operational concepts, more

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[1]The process of moving funding requirements that cannot fit in the FYDP into the years following the FYDP (when funding is not as rigorously constrained) leads to a bump in funding graphs known as a *bow wave*.

emphasis must be put on the "joint" aspect of warfighting, since the type and quantity of systems we need to procure will ultimately depend on the extent to which "jointness" is carried through. However, the QDR did highlight the growing effects current operations were having on personnel and hardware, subsequently causing the flow of funds from modernization into Operations and Support accounts. Putting more emphasis on the consequences of strategy decisions can serve to rectify this problem in the future.

Secondly, the QDR exposed the lack of effective tools for analysis of the various QDR issues. Although there is great reluctance in DoD to move away from older, proven models of analysis, the reality is that these models were ineffective in predicting the outcome of the Gulf War and have not changed in ways that suggest they would do any better for future conflicts. Despite this situation, one positive aspect that did come out of the QDR was the emergence of the Dynamic Commitment games. The structured, participatory nature of this model may be useful in developing and examining future joint operations and, more importantly, provide concepts for subsequent experimentation.

In addition, the minor changes generated in the end game of the QDR suggest the need for "forcing" functions to implement substantive change. These functions would have to be products of either external (Congress or the White House) or internal (Secretary of Defense or Joint Chiefs of Staff) interest or a combination of both. Finally, to foster a more integrative atmosphere for future QDRs, the blurry relationship between OSD and the Joint Staff needs to be clarified, and responsibilities need to be defined more clearly.

The RAND team concluded that the Joint Staff needed to take a more proactive role in the integration of QDR issues in the future. With the services focusing their activities on acquiring systems to enhance their individual roles, it is imperative for the Joint Staff to act as a "neutral" entity and apply its operational expertise to analyze these new systems and capabilities and put them into a joint context. Hence, the services must be convinced to accept the Joint Staff's expertise in the field of joint concepts as a pathway to effective integration. Without this participation, the generation of options and the criteria for major decisionmaking will continue to remain in PA&E.

The usefulness and resourcing ramifications of new systems and concepts must be analyzed in a joint context and hence also require the Joint Staff's lead. Balancing the resourcing requirements of the four major categories—force structure, readiness, modernization, and infrastructure—must now be addressed by the senior military leadership

in a joint context. Finally, and as mentioned previously, a toolbox of new analytical tools is needed for evaluation of anticipated future classes of issues. The Dynamic Commitment game was a good building block toward this toolbox, which could include other structured wargames, spreadsheets, and databases. Even the older service models can be useful, as long the Joint Staff recognizes when and how to utilize them.

The next QDR would benefit greatly from a high-level review of what did and did not work and why, as well as the identification of the entities and processes that were helpful to build on for the future. In the recent QDR, decisions were too often carried to closure without regard or thought to the ramifications or cross-disciplinary implications. Priority must be put on generating options early in the process, sharing them with leadership, and then using them to limit the number of alternatives to be examined, hence focusing analysis on important points and issues. An example of this "filtering" process could be using the JROC as a "screening" entity that would decide when sets of issues are ready for higher-level consideration. A small integration group would then make the difficult decisions and send their actions back down to the working panels for the necessary changes and analysis.

Likewise, some of the QDR's support structures—such as the JROC, the Joint Requirements Board, and JWCA—could be used to examine interconnected sets of issues relating to modernization. The focus would be on analyzing new capabilities based on a review of current and future joint concepts of operation and looking at systems and their place in a "system of systems" from a joint operational standpoint. This is suggested as a way of avoiding the process of making major program decisions after service Program Objective Memorandums (POMs) have been submitted or making case-specific decisions at program milestones, since these actions may not sufficiently address alternative ways to achieve objectives. This focus on joint operational concepts would also bring the added benefit of "operationalizing" the concepts embodied in Joint Vision 2010 by providing examples, such as how and when such concepts as Focused Logistics and Dominant Maneuver would be carried out.

Finally, RAND proposed a Joint Staff organizational framework for future QDRs. The intention is to develop a more structured capability review process that takes advantage of the expertise present in the Joint Staff, CINCs, and the services. From the outset, each of these groups would be tasked with a specific set of responsibilities. One group would look at "what" U.S. forces will be required to do. This group would be centered on the Director for Strategic Plans and Policy (J-5) and the Operations Deputies (OPSDEPS) and would encompass translating the demands of

the National Military Strategy and the emerging security environment into operational objectives and tasks. The second group would determine "how" these objectives would be achieved and would be tasked to the Director for Operations (J-3) and the OPSDEPS. However, focus must be put on consideration of a range of future joint concepts, perhaps in partnership with the Director for Operational Plans and Interoperability (J-7) and the Joint Warfighting Center, instead of the historic emphasis on current operations. This will be difficult to achieve, since future missions and requirements will be determined by future concepts, but it is something that is nevertheless needed. The third group, essentially the J-8, would then concentrate on putting together sets of alternatives and cost-benefit analyses for needed capabilities. Part of its task should be to challenge the findings of the other two groups to foster change, but this group must be sure to stay within its bounds as evaluators of and not generators of concepts and strategy.

Many of the actions suggested above are already being implemented. This should be further encouraged through leadership reviews of the state of the analytical toolbox and examinations of major issues in the QDR. It is imperative that the Joint Staff increase its role in future reviews, because only when a serious program to develop capabilities and take responsibilities is implemented will military judgments be translated into effective advice.

ACKNOWLEDGMENTS

GLOSSARY

A&T	Acquisition and Technology
ABM	Antiballistic missile
AC	Active component
AD	Addressed (code used in Appendix B)
ARNG	Army National Guard
AWE	Advanced Warfighting Experiment
BEF	Base Engagement Force
BRAC	Base Realignment and Closure
BUR	Bottom-Up Review
C^3I	Command, control, communications, and intelligence
C^4ISR	Command, control, communications, computers, intelligence, surveillance, and reconnaissance
CAA	Concepts Analysis Agency (Army)
CEM	Concept Evaluation Model
CINC	Commander in chief
CJCS	Chairman of the Joint Chiefs of Staff
CONOP	Concept of operation
CORM	Commission of the Roles and Missions of the Armed Forces
CPA	Chairman's Program Assessment
CPR	Chairman's Program Recommendations
CS	Combat support
CSS	Combat service support
DAWMS	Deep Attack Weapons Mix Study
DC	Dynamic Commitment

DC4	Dynamic Commitment 4
DepSecDef	Deputy Secretary of Defense
DEPTEMPO	Deployment tempo
DF	Deferred (code used in Appendix B)
DISA	Defense Information Support Agency
DJS	Director of the Joint Staff
DoD	Department of Defense
DoN	Department of the Navy
DPRK	Democratic People's Republic of Korea
DSB	Defense Science Board
ESB	Enhanced separate brigade
FYDP	Future Years Defense Program
IPR	In-progress review
J-3	Director for Operations
J-5	Director for Strategic Plans and Policy
J-7	Director for Operational Plans and Interoperability
J-8	Director for Force Structure, Resources, and Assessment
JCS	Joint Chiefs of Staff
JICM	Joint Integrated Contingency Model
JMETL	Joint Mission Essential Task List
JMRR	Joint Military Readiness Report
JRB	JROC Review Board
JROC	Joint Requirements Oversight Council
JS	Joint Staff
JSPS	Joint Strategic Planning System
JSR	Joint Strategy Review
JV 2010	Joint Vision 2010

JWCA	Joint Warfighting Capabilities Assessment
JWFC	Joint Warfighting Center
LD/HD	Low density/high demand
MEB	Marine Expeditionary Brigade
MEF	Marine Expeditionary Force
MEU	Marine Expeditionary Unit
MNS	Mission Needs Statement
MOE	Measure of effectiveness
MOOTW	Military operations other than war
MRC	Major regional contingency
MRS-BURU	Mobility Requirements Study Bottom-Up Review Update
MTW	Major theater war
NBC	Nuclear, biological, and chemical
NDP	National Defense Panel
NDRI	National Defense Research Institute
NEO	Non-combatant Evacuation Operations
NMD	National Missile Defense
NMS	National Military Strategy
NOW-RC	Term for Current Engagement Activities
NSS	National Security Strategy
O&S	Operations and Support
OOTW	Operations other than war
OPSDEPS	Operations Deputies
OPTEMPO	Operational tempo
OBRM	Objectives Based Resource Management
ORD	Operational Requirements Document
OSD	Office of the Secretary of Defense

P&R	Personnel and Readiness
PA&E	Program Assessment and Evaluation
PERSTEMPO	Personnel tempo
PKO	Peacekeeping operation
POM	Program Objective Memorandum
PPBS	Planning, Programming, and Budgeting System
PRC	Peoples Republic of China
PREPO	Prepositioned materiel
QDR	Quadrennial Defense Review
QST	QDR Support Team
R&D	Research and development
RC	Reserve Component
RS	Resolved (code for Appendix B)
S&R	Strategy and Requirements
S&T	Science and technology
SATCOM	Satellite communication
SecDef	Secretary of Defense
SSC	Small-scale contingency
TAA	Total Army Analysis
TACAIR	Tactical aircraft
TACWAR	A computer model for campaign analysis
TF	Task force
UCP	Unified Command Plan
UJTL	Uniform Joint Task List
USA	United States Army
USFK	United States Forces Korea
USSOCOM	United States Special Operations Command

WEAR	Wartime Executive Agency Requirements
WMD	Weapons of mass destruction

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│                    Outline                        │
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1. BACKGROUND AND STUDY APPROACH

This documented briefing is organized in five sections with two appendixes providing a more comprehensive analysis and listing of issues identified in the Quadrennial Defense Review (QDR). This section provides an overview of the study, including the background, motivations for the QDR, and the research methodology.

This briefing will review the QDR from the perspective of the Joint Staff, with some insights from other participants and observers. There will be no attempt to "grade" anyone's performance. Instead, the focus will be on what worked and what did not, how analytic support helped or hindered the process, and how the Joint Staff might begin to prepare for future reviews.

Section 4 of the briefing (Using Issues as a Basis for Analysis) and a companion set of backup slides in Appendix A address the methodology and specifics of issues linked to a framework of operational missions and functional objectives. Section 4 can be used selectively with Appendix A to explore issues from a particular perspective.

Motivation for QDR

- **External events (fall of the Berlin Wall, collapse of Soviet Union, PRC economic development, performance of Iraqi military, etc.) built expectation of a "peace dividend"**
- **National Security Strategy of Engagement and Enlargement resulted in U.S. forces heavily committed to a wide range of activities stressing people and equipment**
- **Procurement bills for modernization and recapitalization were exceeding expected resources**

There are three important causes for the QDR that influenced its shape and extent, but as we will show, they were not sufficient to cause major changes in the planned defense forces.

First, the defense environment had changed from the Cold War conditions that had influenced defense planning for almost 50 years. There was no longer a major rival with economic and military capabilities similar to those of the United States (a "peer competitor") and an ideology in serious conflict with democratic values. There was also a perception that the capabilities that U.S. forces demonstrated in the Gulf War were so overwhelming that we may not need all of the planned modernized weapon systems. (McCain, 1996.)

Second, there was a growing perception of a possible mismatch between the strategy and the way our resources were being allocated. The Bottom-Up Review (BUR), a comprehensive review of force structure requirements conducted at the beginning of the first Clinton administration, focused on the force structure required to conduct two near-simultaneous major regional contingencies (MRCs), while our forces were increasingly required to support operations other than war (OOTW) in Bosnia, Somalia, and Haiti. (Aspin, 1993, pp. 10–11.) The BUR specifically addressed alternative force packages and the risk associated with each for a two-MRC scenario.

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Finally, there were serious concerns that the major new defense acquisition programs—F-22, Joint Strike Fighter, F/A-18, New Attack Submarine, new aircraft carriers, Comanche helicopter, etc.—were not affordable within projected defense budgets.[1]

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[1] "Defense Budget Faces Squeeze in 1997, Head of House Panel Says," (1996).

RAND's Tasking

- **Provide analytic support to the QDR Support Team**
- **Utilize Objectives-Based Planning template to assess impacts of QDR issues on joint operations**
- **Perform lessons-learned assessment following the QDR**
- **Link lessons learned and QDR capabilities to JWCA activities**

RAND has supported the J-8, in particular the Requirements, Analysis, and Integration Division, through the growth of the Joint Warfighting Capability Analysis (JWCA) process. Part of that research included developing a framework to support integration of issues raised in the JWCAs. (Lewis et al., 1996; Schwabe, Lewis, and Schrader, 1996.) As QDR activities began in the summer of 1996, the Director for Force Structure, Resources, and Assessment (J-8) hoped the existing Objectives-Based Resource Management (OBRM) framework would be helpful in integrating QDR issues.

As the QDR analysis phase began, the fast pace and structure of the task forces and the lack of a strong attempt at integration resulted in a decision to focus RAND's resources on capturing lessons learned and linking them to future JWCA activities.

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│              RAND Research Approach                       │
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│                                                           │
│    • Review and catalog briefings presented to           │
│      leadership during QDR                                │
│    • Interview key participants on nonattribution         │
│      basis                                                │
│    • Focus on analytic approaches, required tools,        │
│      effectiveness of different methods                   │
│    • Extract issues and link them to CINC missions        │
│      or service functions                                 │
│    • Analyze resulting database for insights and          │
│      lessons learned                                      │
│    • Identify analytic tools for next round of reviews    │
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This research began with a review of the briefings used to inform the Joint Chiefs of Staff (JCS) and the commanders in chief (CINCs) of the status of the QDR. Selected key briefings were provided to the RAND research team, as well as selected briefings presented to the Secretary of Defense (SecDef). These briefings and the issues they presented to the senior leadership were cataloged. After reviewing the evolution of selected issues, RAND conducted a series of interviews with participants in the QDR process, primarily Joint Staff and service members. These interviews were wide ranging, based on a promise of confidentiality. Because of the nonattribution policy, some of the observations are best characterized as perceptions rather than facts. Perceptions are important because they influenced the behavior of the participants.

RAND's work with the J-8 has, for several years, focused on the analytic tools that are required to support the Chairman of the Joint Chiefs of Staff (CJCS). Since the BUR was criticized for the alleged inadequacy of the analytic tools (GAO, 1996, pp. 2–3), it is particularly important to understand which tools worked and which did not.

The integrative framework, previously refined for J-8, centers on the missions of the combatant commanders, so it was used as an organizing mechanism for the issues in the QDR. However, many issues in the QDR were only indirectly related to operational questions. These issues were

associated with the Title X responsibilities of the services and the defense agencies. As a result, the planning framework was extended from its original operational focus (Pirnie, 1996) to include eight functional objectives: Personnel Management; Training; Acquisition; Installation Management; Sustain Forces; Organize Forces; Command, Control, Communications, and Intelligence (C^{3}I) Development, and Medical Care synthesized from Department of Defense (DoD) Directive 5100.1.[2]

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[2]DoD Directive 5000.1, "Defense Acquisition," March 15, 1996.

Issue Analysis Overview

Briefings	Issues		CINC Missions	
				# issues*
mid-Sep Coord Mtg	1		CONUS Defense	53
late-Sep CJCS Mtg	17		MTW	109
early-Oct NOW-RC	3		NEO	41
mid-Oct DJS Mtg	22		Shaping	92
mid-Oct CJCS Mtg	5		Counterproliferation	51
late-Oct DJS-Tank	2		Counterterrorism	35
mid-Nov Tank	24		Humanitarian	61
mid-Feb JROC	43		Counterdrug	41
mid-Mar DC4 Outbrief	23			
late-Mar DC4 Service IPR	4		**Service Functions**	
Emerging Assessment	16			
Emerging Readiness	5			# issues*
Infrastructure Draft	22		Personnel Mgmt	62
Integrated Options	10		Training	22
Infrastructure Issues	5		Acquisition	65
SecDef Saturday 1	27		Installation Mgmt	40
SecDef Saturday 2	10		Sustain Forces	42
SecDef Saturday 3	6		Organize Forces	61
QDR Report	94		C3I Development	37
TOTAL	366		Medical Care	22

*Numbers do not add—issues can relate to more than one mission or function

Issues were extracted from the selected briefings and reports. In some cases, the briefings addressed managing the QDR process and did not address many substantive issues. For example, the first briefing on the list addressed QDR organization and projected timelines but also included an important recurring theme: "Develop recommended core military capabilities with their rationale." If the answer to the questions raised by this issue had been available in September 1996, the rest of the QDR would have been much simpler.

We extracted 366 issues from the QDR briefings and reports. As a first step in analysis, each issue was tagged with one or more missions or functions that were affected by the issue. The groupings on the right of the slide show that the most frequent association was with the warfighting mission of major theater war (MTW),[3] but all missions and functions had some associated issues.

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[3]In the BUR, the postulated wars in Southwest Asia and Korea were referred to as MRCs. In the QDR, the same scenarios were considered to be MTWs.

Outline

- Background
- ► Joint Staff QDR Activities
- A Range of Viewpoints on QDR
- Using Issues as a Basis for Analysis
- Conclusions and Insights for Future Reviews

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2. JOINT STAFF QDR ACTIVITIES

This section will address the evolution of organizational relationships and analytic activities. It will identify the differences between the planned and the actual flow of the QDR and its supporting analysis.

Original JS QDR Analytic Concept
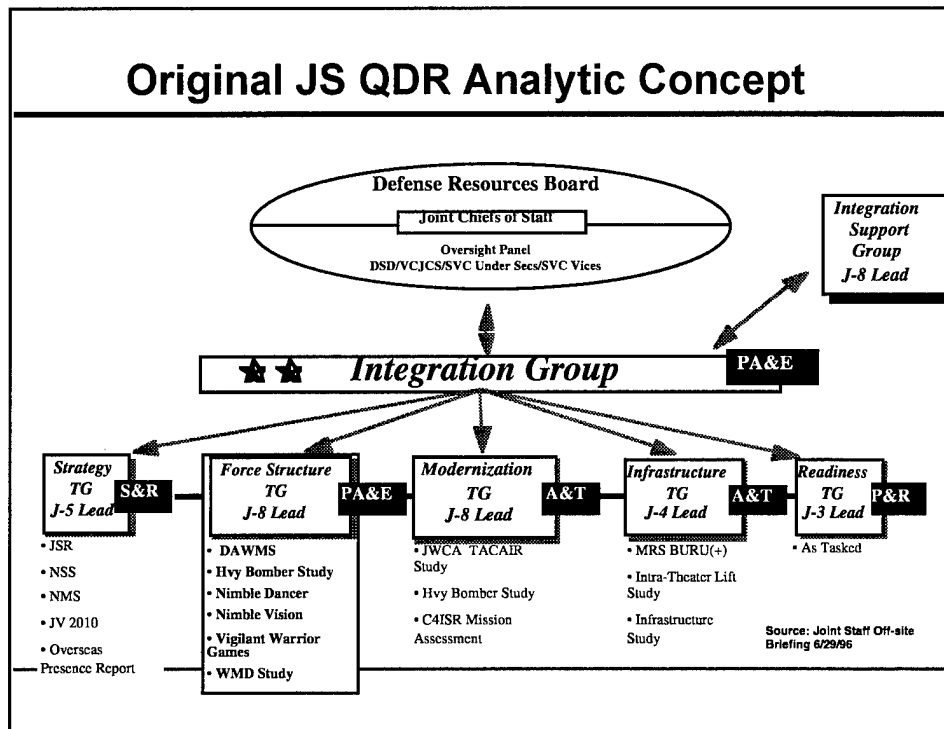
This is a Joint Staff figure from June 1996. It shows the planned organizational structure with shared Office of the Secretary of Defense (OSD)/Joint Staff responsibility at all levels and a strong concern for integration among the task groups. The two-way information flow between the senior defense leadership and the integration group and the direction from the integration group to the task forces reflect the early view of how the QDR would function. This is a classic approach to defense resource decisionmaking, in which the problem is broken up among the constituent bureaucracies. In response to the Goldwater-Nichols changes in functions and responsibilities, the new features are an acknowledgment of the need to integrate and the inclusion of the Joint Staff along with OSD.

Each of the task groups or panels contains a listing of studies that were already under way at the start of the QDR. The QDR leadership in OSD and the Joint Staff assumed that these studies would meet a significant fraction of the needs for analysis during the review.

For a number of reasons, primarily the approaching presidential elections, this model was not effectively used in the QDR. This was due to the fact that, prior to the election, the current administration did not want to limit the choices of possible successors and did not want to appear to threaten important programs or constituencies. Integration of disparate activities is

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always difficult, but because of the interdependencies, the integration of these activities proved to be unattainable.[1] The new dynamics of CINC participation, a proactive Joint Requirements Oversight Council (JROC)–JWCA process, and evolving relationships between the Joint Staff and OSD staff contributed to the problem.

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[1]Examples of interdependencies include the following: changes in force structure will require changes in infrastructure; changes in assumptions about resources can affect all activities; changes in modernization can support new concepts of operation that may require fewer or smaller forces.

Evolved JS Analytic Concept

Service Efforts — OSD Efforts — CINC Efforts — Others Efforts

Engagement — "Transition Game" — Near-Peer

Multiple LRC — MRCs

Trends, Insights, Questions

Force Structure

Services QDR Organizations

Strategy — Modernization

Integrating Body

Infrastructure — Readiness

Source: Director Joint Staff Briefing 10/18/96
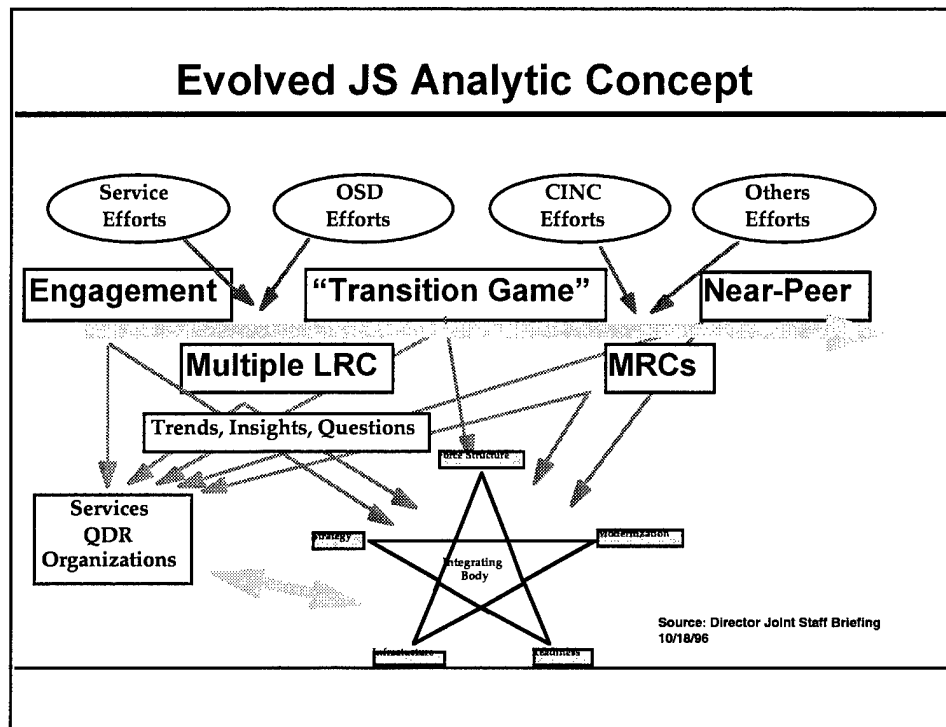
By October 1996, it was clear to the Joint Staff that the process was not working as designed. Task group activities were under way with additional analysis in separate groups, such as "NOW-RC," that attempted to measure the extent of commitment to OOTW missions in the recent past. The demand for military capabilities became a more useful basis for data collection and analysis. While the BUR had focused on MRC demands, the QDR was looking at the entire spectrum of operations. This reflected the evolving relationships, in which CINCs and service chiefs concerns are directly represented to the SecDef by the CJCS, not just through representatives in forums led by the OSD staff.

Since the QDR-required panels were still examining their assigned issues, some integration was required, both for consistency and efficiency. J-8 initiated a "Star Chamber" to bring together flag and general officers from each of the major task forces with service representatives in an attempt to coordinate, if not manage, QDR activities. These meetings were conducted through the fall of 1996 but did little more than share information. They were abandoned altogether by the later phases of the QDR because they did not add value and because major issues had escalated to the level of SecDef, CJCS, and the service chiefs.

The services were well connected to all of the operationally focused activities before the presidential election, but they quickly found that

much of the data the Joint Staff requested were neither routinely collected nor maintained in similar formats by the different services.

QDR Requirements and Analysis Plan

Congressional Questions	JSR	NOW-RC	Multi LRC	Transition	MRCs	Peer
Threats and Scenarios	X		X		X	X
Assumptions	X		X	X	X	X
Strategy and Force Structure	X	X	X	X	X	X
MOOTW and Peace Operations		X	X	X		
Technology Advancements			X		X	X
> 120 Day Conflicts		X	X	X		
Reserves		X	X	X	X	X
Tooth to Tail		X	X	X		
Airlift and Sealift		X	X	X	X	
Forward Presence, PREPO, Deployed Force	X	X		X	X	
Resources Must Be Shifted Between Theaters			X	X	X	
Revisions to the UCP						
Our Questions (Joint Staff)						
Infrastructure		X	X	X		

Scorecard from 10/21/96 CJCS briefing

The legislation mandating the QDR and the National Defense Panel (NDP) asked that 12 specific questions be answered. (U.S. Congress, 1996, pp. 209–215.) This J-8 table shows how each of the demand-side activities was expected to contribute insights for answering the Congressional questions. The supply and demand model is used in strategic resource planning. Capabilities are "supplied" by the services and defense agencies to meet the "demands" of the operational commanders. The dynamics of the process of analysis would shape how the questions were answered, so it was important to consider where they would be addressed.[2] In addition, it was clear to the Joint Staff that infrastructure questions needed to be addressed (as well as additional supporting analysis on the role of Reserve Component [RC] forces). This table will be used in the concluding section to assess how well the QDR answered these questions.

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[2]Note that there was no plan to examine revisions to the Unified Command Plan (UCP).

Phases of the QDR

	Startup	Preelection	Engagement	Endgame
Principal Activity	Ongoing studies: DAWMS, CSEEA, JSR	Joint Staff and services conduct stovepipe analyses	Major effort to structure issues within subgroups	Need for decisions resulted in development of options by OSD staff
Control Agent	OSD/JS planning for integrated, open process	JS with little OSD leadership	OSD leadership engaged but process unsuited for integration and tradeoffs	OSD control; escalation of activity from working level to Senior Steering Group
Service Activity	Wait and see	Stand up support organizations; participate at working level	Leadership involvement; bought into $15B shortfall; movement of issues to JROC	JROC collaboration with JCS to regain focus
	Sep 96	Dec 96	Apr 97	

This assessment revealed that the QDR activities could be viewed in four distinct phases characterized by the nature of the principal activities conducted during each period. The breakpoints are necessarily arbitrary, since each panel proceeded at its own pace. It is also possible to identify the relative roles of OSD and the Joint Staff in each phase. The process required a narrowing down of wide-ranging activities to a more manageable set of issues for SecDef resolution. Since resource allocation is the way that decisions are implemented, there was a natural evolution of the intended QDR process into a Program Assessment and Evaluation (PA&E)–directed review of programmatic issues.[3] (Lewis, Roll, and Mayer, 1992.)

In the startup phase, there was concern that the process would not be open and participatory. It was hoped that the extensive set of ongoing analyses would provide a defensible basis for the ultimate QDR decisions (to avoid some of the criticisms of the BUR).

The pre-election phase was characterized by many groups analyzing pieces of problems led by the Joint Staff. The OSD staff was reluctant to

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[3]A similar process occurred in the Base Force analysis, in which options were generated by the CJCS and the Joint Staff, and decisions were eventually made in an OSD program-review setting.

direct the analysis or provide substantive guidance, in part because it could be someone else's decision and in part because tough choices might become election campaign issues. The lack of direction resulted in answers to questions that were not relevant in the QDR endgame.

During the postelection engagement phase, OSD attempted to take control of the ongoing set of activities. However, the lack of integration in the earlier phases (and in the engagement phase) made it difficult to restart or refocus the momentum of the task forces.

Although a lot of work and time went into the early phases, it was only in the endgame, when the OSD staff started to prepare specific sets of alternatives and after the military leadership came to accept the $15 billion risk to necessary modernization in the Future Years Defense Program (FYDP), that the real issues began to emerge.[4] The realization that some changes could not be avoided caused a movement of selected issues to the JROC and began a negotiation process (quite distinct from the formal QDR activities) that led to a set of QDR decisions acceptable to the SecDef and the JCS. Although the JROC did not make decisions, it provided a forum (not available in the Base Force and BUR reviews) that enabled the three major parties (OSD, Joint Staff, and services) to come together, examine the facts, and provide their principals with advice and recommendations. The JROC is a Joint Staff organization whose members are the service vice chiefs and the vice chairman, which in the endgame served as a conduit to the services for information on emerging issues and OSD proposed alternatives.

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[4]According to the QDR report,

> On balance, the QDR proceeded from the assumption that, by the end of the current six-year plan, as much as $10–12 billion per year of funding would be at risk to migration arising from unplanned bills, unrealized savings, and new program demands. Under those circumstances, procurement funding would erode from the planned savings level of more than $60 billion in the FY 2001 to 2003 period, to a range of $45 billion to $50 billion, but no higher.

During the QDR, this was expressed as a $15 billion risk that was subsequently revised.

Joint Staff Served as Moderating Force

- DoD not well structured to integrate disparate pieces, so integration mechanisms ineffective until resourcing phase - ultimately fell back on PA&E to present options for decision.
- JCS and CINCs very sensitive to demands of ongoing operations (and lack of outside acceptance)
- Joint Staff planned from the beginning to examine NOW-RC and transition from SSC to MTW factors
- Dynamic Commitment was created by J-8
  - existing tools did not adequately represent demands below MRC/MTW
  - an evolving process that filled a gap
- In the end game, Joint Staff analyses (particularly Dynamic Commitment) permitted the JCS and JROC to block more far-reaching force structure or programmatic changes

Because OSD contains its own set of "stovepipes," few mechanisms were available for the integration of QDR activities. OSD could not ignore the Joint Staff, and the Joint Staff activities needed to include OSD participation. As in previous reviews, PA&E integrated the issues, but in the context of the task force stovepiped organization, not across panels. The QDR organization of functional task forces (strategy, modernization, infrastructure, etc.) brought organizations and individuals with common interests into a stovepipe that limited consideration of cross-cutting changes that might even eliminate some functions.

However, the demands of current military operations, although not well documented, were important counterbalances to radical change in the force structure and readiness processes. The Joint Staff pushed for a thorough examination of how our forces had been engaged in the recent past and how those deployments might affect plans for MTWs. This operational focus helped to justify the service baseline requirements and their continuing claims on resources. It also limited the extent of change that might be acceptable.

Dynamic Commitment, a participatory structured analysis, provided insights on the low end of the spectrum of operations but also showed the limitations of existing tools for force structure analysis. It brought together representatives of the services, CINCs, Joint Staff, Defense

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Agencies, and OSD to examine the demands generated by a wide range of contingencies based on recent operational deployments. It also forced planners to focus limited resources and political constraints. As the game and its supporting databases developed, a more credible case for specific consideration of the demands of small-scale contingencies (SSCs) emerged. This informal approach stands in stark contrast to computer wargaming with such models as TACWAR and serves as an example of the kind of tools that should be available. Although the games did not address how well allocated forces were likely to perform or if too many forces were sent to a contingency, they contributed to an evolving analytic capability that filled a gap in stating and understanding military requirements.[5]

Overall, the legacy of JWCA analysis of modernization issues, detailed strategy review building in the Joint Strategy Review (JSR), and the capital built up in Dynamic Commitment permitted the CJCS and the service chiefs to explain military concerns, to build consensus with OSD on some issues, and to block far-reaching force structure changes that were not supported by analysis of comparable depth and quality. The Joint Staff was able to make a strong case for the need to keep a force structure like the current one to meet complex demands of the present environment and therefore to build a case for caution when considering radical changes. This observation reflects an evolving relationship between OSD and the Joint Staff and is quite different from the situation at the time of the Base Force and BUR analyses.

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[5]It should be noted that Dynamic Commitment only narrowly examined the logistics and support implications for its force allocations. Future use of this gaming technique could provide better insight on "below the line" forces if sufficient time is allocated to this important dimension.

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│                         Outline                           │
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│     • Background                                          │
│     • Joint Staff QDR Activities                          │
│  ➤ • A Range of Viewpoints on QDR                         │
│     • Using Issues as a Basis for Analysis                │
│     • Conclusions and Insights for Future Reviews         │
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3. A RANGE OF VIEWPOINTS ON THE QDR

This next section will examine the evolution of the debate in each of the QDR five major task forces. It will also discuss the service perspectives on the QDR.

Evolution & Observations
on the Strategy Debate

Startup	Preelection	Engagement	Endgame
JSR development in concert w/ services	Examine changes from BUR; Build consensus on JSR perspective	JSR signed after DepSecDef review	Current strategy validated with greater emphasis on SSCs

Strategy TF refines JSR requirements

S&R develops QDR strategy

- Major accomplishment of QDR was consensus building on demands for non-MRC missions
  - JSR assessed environment more than it defined the strategy
- Shape, Respond, Prepare QDR strategy clearly shows a broader focus for defense planning and permits examination of tradeoffs and priorities.
- However, the strategy is so all-encompassing that it provided only marginal help for the difficult resourcing decisions since no priorities were included.
- Dynamic Commitment succeeded in making demands of SSCs and forward presence clear and provided additional benefit of developing a cadre of officers with experience in joint operational planning.

The JSR's detailed assessment of the security environment provided a sound foundation for a review of required capabilities, even though it did not provide a specific future strategy or sets of strategy options. This is clearly an area in which the JCS and the CINCs are viewed as major players, and the OSD staff is reluctant to challenge a united military front. The JCS role was enhanced by the timing of the early QDR work—ahead of the elections.

The JSR is a routine part of the Joint Strategic Planning System (JSPS), but the timing of the QDR gave it unusual prominence. The services were aware of the consequences of the narrow focus of the BUR strategy and so forced an iterative development of the new statement of requirements for their capabilities. This time the completed JSR was sent to the Deputy Secretary of Defense (DepSecDef) for comment. It was anticipated that the QDR strategy would be in place early enough to shape the activities of the other task forces. The JSR, as a precursor to the QDR strategy, was not signed by the CJCS until mid-January. Nevertheless, the broader focus on requirements for engagement and SSCs became a part of the strategy debate. This had not been the case in the BUR, in which MRC

requirements dictated force structure.[1] The review provided the first hint of a possible need to resource capabilities different from those provided to win MTWs.

The lack of an approved strategy did not mean that the QDR was merely a budget drill. In fact, the participants had already learned the effects of ongoing unplanned-for military activities, such as the mission in Bosnia, which had led them to expect more such activities and to take the possibility into account in planning.

Even though the strategy debate resulted in a useful rubric (Shape, Respond, Prepare) to characterize the elements of military requirements, the demands were so great and all encompassing that they provided little help in prioritizing requirements. As a result, resource decisions will remain more qualitative and judgmental and less quantitative and objective.

Overall, the strategy debate, including the Dynamic Commitment war games, contributed to the case for a full spectrum of capabilities and resulted in no strategy issues for the SecDef to resolve in the endgame of the QDR. However, it was essentially a consensus-building activity, not an analytic activity. An additional benefit of the detailed examination of the scenario vignettes in Dynamic Commitment with service, Joint Staff, and CINC participation was the exposure of a very large group of officers and civilians to elements of joint operational planning.[2]

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[1]Although the BUR treated MOOTW as a lesser-included case for the defining MRC capabilities, the Navy was successful in arguing that presence requirements mandated a larger carrier and amphibious force posture than the MRC requirement.

[2]The services were less enthusiastic about the value and the validity of Dynamic Commitment than the Joint Staff. See later comments on service perspectives.

Evolution & Observations
on the Infrastructure Debate

Startup	Preelection	Engagement	Endgame

J-4 organized to respond very early

OSD finally comes on line in Nov. 5-7 issues assigned to each task force

Endgame briefings and options by PA&E with different numbers

Infrastructure viewed as bill payer to fix modernization

Bogeys Assigned by DepSecDef

Most issues deferred to Defense Reform Panel

- Major failure for QDR.
- DSB report alleging $30B in potential savings started QDR with unrealistic expectations about paying for modernization.
- Little history of Joint Staff involvement in infrastructure issues. Main activity has been between services and OSD with many potential political pitfalls. But services argued that infrastructure was linked to missions.
- Minimal OSD leadership in disciplining infrastructure review process. Repeated disaggregation of subgroups and assignment of bogeys doomed process and frustrated other panels. Perception of serving as billpayer for more important programs. (Should be assessed early in review process to understand potential for improvement.)
- Definition is still a problem. Logistics is operationally important and a key concern of the Joint Staff. Facilities and other infrastructure costs are enablers linked to warfighting that reduce the pool of resources available for operations and modernization. New role for Joint Staff that will continue to evolve.

As much as the strategy debate resulted in a better understanding of the demand for capabilities, the infrastructure debate was a failure. The Defense Science Board (DSB) study (DSB, 1996) created unrealistic expectations (suggestions of potential savings of $30 billion per year), and special interest groups in OSD (and the services) quickly organized to resist change.[3] Reams of analysis and options were generated by infrastructure panels and subgroups that continued to be further subdivided into smaller groups of proponents for special interests. An additional problem for the Infrastructure Panel analysis was the extensive reviews already conducted by the services to implement efficiencies and to take credit for them in their POMs. The Joint Staff, in general, and the JWCA process, more specifically, had little experience in dealing with infrastructure issues outside of logistics.[4]

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[3]It should be noted that factors beyond the control of the DoD contributed to the difference between DSB projections and the levels of potential savings identified by the Infrastructure panel. The need for relief from limits on privatization and outsourcing, as well as the ability to close and consolidate facilities, clearly required strong White House and congressional support.
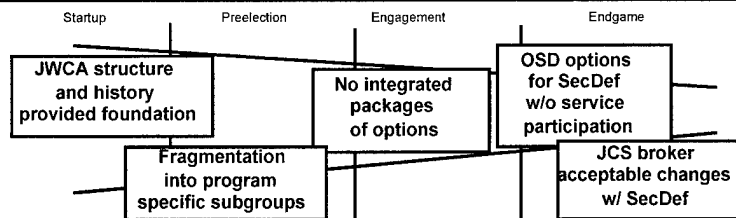
[4]A new JWCA team, Re-Engineering Infrastructure, has been established but will need more attention and leadership support than was given to the QDR infrastructure review.

The area of infrastructure analysis experienced the biggest problem with lack of integration and leadership. Another contributing factor was the lack of understanding of the interdependencies of the pieces of service infrastructure and special interests ("rice bowls"). Many options with detailed cost analyses had been generated before the election. When OSD reasserted control after the elections, many issues were revisited, and previous analyses were discarded. Even more frustrating was the emergence of issues, alternatives, and costs in the endgame that had not been considered by the panels. The disconnected pieces of the infrastructure debate led to frustration for the new SecDef and a decision to defer most issues to the Defense Reform Task Force. On the other hand, the QDR problems may lead to a more focused approach to reducing infrastructure.[5]

The Joint Staff will need to expand its capabilities in infrastructure analysis, both because of the direct effects on combat effectiveness of logistics and because of the indirect effects of allocating resources to inefficient infrastructure and thereby limiting combat potential. Solving infrastructure problems remains a service Title X responsibility (and an OSD responsibility for defense agencies), but its effects on warfighting capabilities need to be assessed in a joint context.

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[5]The Defense Reform Initiative Secretary Cohen announced on November 10, 1997, settled many issues raised in the QDR and establishes a Defense Management Council to pursue downsizing of defense agencies in a more effective forum.

Evolution & Observations on the Modernization Debate

Startup   Preelection   Engagement   Endgame

JWCA structure and history provided foundation

No integrated packages of options

OSD options for SecDef w/o service participation

Fragmentation into program specific subgroups

JCS broker acceptable changes w/ SecDef

- Big issues taken off the table selectively. Didn't get to $60B in real terms. Bow waves remain outside FYDP.
- Too disconnected from strategy considerations. New systems should require new concepts of operation that could radically change how we do things today. QDR put most energy into examining requirements and capabilities of present and near-term future (well before new systems will be fielded in sufficient numbers to make a difference).
- Most modernization issues had been examined in JROC/JWCA process, so technical details of issues were understood and could be provided as needed. However, there was no attempt to package groups of options with strategies and force-structure alternatives
- Service prerogatives needed to be maintained. Little incentive to find savings.

Paying for modernization was an unstated goal of the QDR. To accomplish this goal, some programs might need to be canceled to pay for more important programs, but there was an expectation that savings from infrastructure and readiness would result in net increases in modernization funding. In the end, major aviation programs were adjusted, but the goal of $60 billion (in constant dollars) for procurement was not achieved and a bow wave of increasing requirements remained outside the FYDP.

This is an area in which the Joint Staff was well prepared. The issues of pace and scope of modernization had been treated in the JROC/JWCA process, in part because of the requirement in the acquisition process for JROC validation of requirements (Mission Needs Statement [MNS], Operational Requirements Document [ORD], etc.) and in part from the broader charter of JROC reviews to support the Chairman's Program Assessment (CPA) and the Chairman's Program Recommendations (CPR).[6] As a result, there was a large knowledge base in the Joint Staff

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[6]The role of the JROC changed under the leadership of Vice Chairman ADM William Owens. Although the Goldwater-Nichols reforms empowered the chairman to assist the President and the Secretary of Defense in providing for the strategic direction of the armed forces and providing advice on Requirements, Programs, and Budget, the tools for systematically reviewing issues were lacking. The evolving JROC, JRB, and JWCA

(J-8) on the capabilities and cost of modernization programs. What was lacking was a linkage of emerging capabilities to the strategy and new joint concepts of operation to utilize new systems.

Without an integrating mechanism to force the generation of options and tradeoffs, modernization panel activities generated advocacy groups for individual programs. In the endgame, OSD (PA&E) generated options with little input from or debate within the modernization panel. The result was that the leadership of PA&E rejected modernization options. Furthermore, senior leaders were pushed to broker program adjustments to solve the problem of migration of funds planned for modernization to pay for current operations.

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processes provide the mechanism and have resulted in much more extensive reports from the chairman to the SecDef.

**Evolution & Observations
on the Force Structure Debate**

Startup   Preelection   Engagement   Endgame

"Force Structure Alternatives" is the name of the law

Impact of cuts to be assessed in DC4—dropped

Percentage cuts reintroduced at SecDef direction

Perceived as just another billpayer for modernization

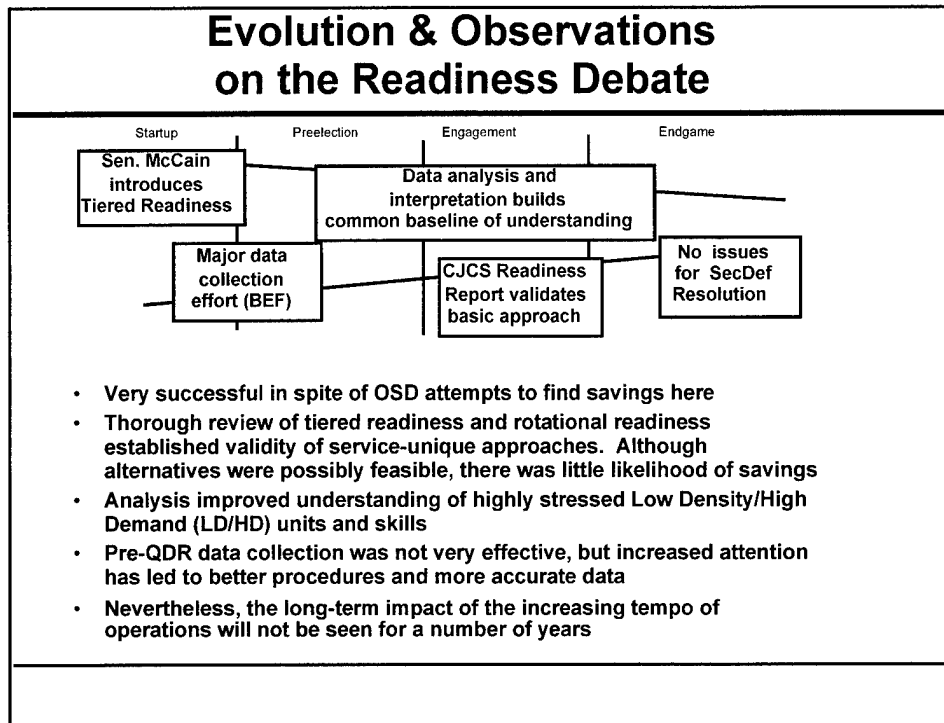JCS broker acceptable cuts w/ SecDef
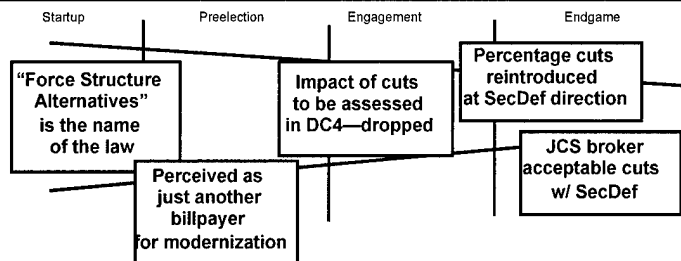
- Biggest disappointment next to infrastructure.
- There was little incentive for services to provide serious alternatives and there were very high risks. Salami-slice approach of 10%, 20%, and 30% cuts only exacerbated the problem and enforced view that process was divorced from strategy. Caused breakdown of QDR process until SecDef enforced closure.
- Details of force structure ultimately fall back on services, so there probably is only a need to identify major packages of alternatives and assume that they will be efficiently supported.
- However, joint operations may not be adequately supported by individual service force structure decisions, so there is a role for the Joint Staff in shaping force structure.

The force structure debate that OSD and the services anticipated never materialized in the QDR. All the services were protective of their forces and convinced that current activities showed that there was high risk associated with any reductions. Since there were no new joint concepts of operation for future operations to consider, there was no basis for change other than cost savings. As a result, proportional cuts ("salami slicing") were proposed at levels of 10, 20, and 30 percent so that their risks could be assessed in MTW analysis and in Dynamic Commitment. The services strongly resisted examination of these alternatives and refused to provide "more sensible" packages for fear of losing disproportionately vis-à-vis the other services.

In the endgame, some force structure changes were selected as part of the end-strength reductions, but the levels chosen were based on negotiations among the JCS and the SecDef and were not options that arose in the force-structure analysis. This negotiation, outside the QDR analytic framework, is a stark contrast with the much more systematic review of force-structure alternatives during the Base Force analysis. (See Lewis, Roll, and Mayer, 1992.) The services were permitted to implement personnel reductions in their own way, resulting in different mixes of active, reserve, and civilian manpower. This resulted in the emergence of a serious rift between the active Army and its reserve components. The

problem was exacerbated by the lack of an in-depth review of alternative force structures in the QDR.

For the most part, organizational decisions are the prerogative of the individual services, but the Joint Staff needs to be able to assess how well the capabilities the services provide meet the needs of the CINCs. If, for example, the Army's emphasis on divisions as the principal unit that can operate self-sufficiently is perceived to limit joint operations in small-scale contingencies, it is appropriate for the chairman to make it an issue.

Evolution & Observations
on the Readiness Debate

Startup	Preelection	Engagement	Endgame

Sen. McCain introduces Tiered Readiness

Data analysis and interpretation builds common baseline of understanding

Major data collection effort (BEF)

CJCS Readiness Report validates basic approach

No issues for SecDef Resolution

- Very successful in spite of OSD attempts to find savings here
- Thorough review of tiered readiness and rotational readiness established validity of service-unique approaches. Although alternatives were possibly feasible, there was little likelihood of savings
- Analysis improved understanding of highly stressed Low Density/High Demand (LD/HD) units and skills
- Pre-QDR data collection was not very effective, but increased attention has led to better procedures and more accurate data
- Nevertheless, the long-term impact of the increasing tempo of operations will not be seen for a number of years

The readiness debate is another success story for the QDR from the perspective of the Joint Staff and the services. Senator McCain and others had been arguing that there were potentially large savings in new approaches to readiness (tiering readiness levels more extensively than is currently done). (McCain, 1996.) Data collected for the Base Engagement Force (BEF) analysis and service reviews in response to Senator McCain went a long way to explaining that, although services define readiness (operational tempo [OPTEMPO], personnel temp [PERSTEMPO], deployment tempo [DEPTEMPO]) in different ways, each has mechanisms that are appropriate for their forces. The analyses also showed that current practices had evolved to meet unique service requirements and that changing them to mirror another service would not provide savings.

Prior to the QDR, the data on OPTEMPO and its effect on personnel were not routinely collected in ways that were helpful for assessing joint readiness. As a result of the QDR, there are many changes that portend improved understanding of future trends and provide better means of monitoring the health of the force. These new reporting procedures are important because there are disturbing symptoms that the recent levels of peacetime activity are causing retention and recruiting problems. However, most analyses and data focus on how well we are doing with respect to a set of standards and not on whether those standards result in required capabilities or are an efficient way to achieve objectives. For

many years military units reported readiness in one of four categories: C-1, C-2, C-3, and C-4, with C-1 the highest and desired level for ready or deployed forces. Each category was defined by specific percentages of personnel or equipment or by more-subjective training criteria. These measures missed secondary effects of frequent deployments and the changing pace of operations, as well as important, but more difficult to measure assessments of readiness to perform a range of missions. The establishment of the Joint Military Readiness Report (JMRR) was intended to provide a better assessment of capabilities.

Service Perspectives

- **Overall**
  - QDR was a damage-limiting exercise. There was little expectation of any gain and a high risk of major losses.
  - The cost of the QDR in terms of manpower committed and leadership opportunity costs far outweighed its payoff.
  - Acceptance of concept of services retaining savings from efficiencies a big plus—if it is sustained.
  - QDR generally viewed as a resource drill.
  - Some of attempts at openness were counterproductive because lower level representatives were not empowered to commit their leaders.

Thus far, the analysis has focused on the Joint Staff and its interactions with OSD. Service concerns in specific areas of the QDR debate have been noted, but their overall perspectives are often quite different from those of the Joint Staff. While the Joint Staff generally saw the QDR as an enabler to help define needed military capabilities, the services approached the QDR much more cautiously and reluctantly. With the congressional budget-resolution process essentially capping DoD's budget at current levels (in real terms), the QDR became a zero-sum game where increases for one service would need to come at the expense of another.

The cost of the QDR was also viewed as disproportionate for the limited set of decisions that resulted. The individual services could not afford to stay out of the various task forces, subgroups, and so-called integration groups, but participation came at the expense of the principal duties of the affected officers and staff. Each service emphasized different areas of the QDR based on their separate QDR strategies and their perceptions of risks and opportunities.

Because services had experience in losing funds during program and budget reviews without compensating increases in other areas, the concept of being allowed to keep savings from infrastructure or force structure savings emerged as a useful incentive to change. If the Army perceives that the loss of two division flags would result in increased

funding for Air Force fighter procurement, there will be little incentive for change. On the other hand, allowing the Navy to recapitalize the fleet by retiring some ships earlier than planned to pay for new construction in the Navy provides a catalyst for change. If the QDR had broader support for major change, the question of changing budget shares could be addressed. That, however, is not what happened in *this* QDR.

Although this research generally supports the premise that strategy considerations shaped the QDR, the services all felt that this was a "resource drill" (i.e., an exercise that adjusted funding marginally but did not address more-strategic issues) from the start. In addition, although the Joint Staff leaders were concerned with maintaining an "open" process, the introduction by middle-grade (O-5, O-6) officers of issues affecting a service's ability to conduct operations was a serious problem. The underlying theme to this frequently stated concern is confidence and competence. Both the Joint Staff and the services need to be aware of these concerns and work to minimize their validity.

In addition to common concerns all the services expressed, we will also address unique service perspectives individually: how well they thought their capabilities were presented in the QDR, their perspective on the openness of the process, and their level of satisfaction with the results.

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│                 Service Perspectives                          │
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│                                                               │
│   •  Army                                                     │
│      ··· Representation of Capabilities                       │
│            ·  Dynamic Commitment and Readiness analysis strengthened │
│               Army's case for current force structure         │
│            ·  Lack of well-defined new concepts from Force XXI limited case │
│               for modernization                               │
│            ·  However, the AWE activities provided a focus for attempts to │
│               move forward                                    │
│      ··· Openness of Process                                  │
│            ·  Extensive low-level participation but perceived option │
│               generation and decision making processes to be closed │
│      -- Satisfaction with Results                             │
│            ·  Very satisfied                                  │
│            ·  General perception in summer 1996 was that Army force │
│               structure would be billpayer (2 divisions)      │
│      -- QDR exposed AC/RC rift without generating insights on how │
│         to resolve problems                                   │
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The Army benefited most from the QDR focus on the lower end of the spectrum of military activities. The Navy has long supported the importance of overseas presence and has successfully linked its force structure to the peacetime presence requirements of the CINCs. In contrast, the Army has used a Total Army Analysis (TAA) process for force structure development that is based on the Army's perceived requirements to conduct two MTWs. The QDR showed that the existing force structure, independent of MTW requirements, was more heavily engaged than during the Cold War and that, in spite of a few low density, high demand unit problems, the size of the current active Army was "about right." Pre-QDR criticisms of Army force structure were based on the potential for new ways to fight MTWs more quickly and more effectively so that Army's force buildups could be shorter and its force structure smaller. The emphasis on the high level of current operations deflected but did not remove the controversy over MTW requirements.

The future path of the Army was more of a problem. Although Force XXI (the next Army after today's "Army of Excellence") is characterized by digitization initiatives that will increase information availability and force responsiveness, little detail is available on what the new units will look like and how much more capable they will be than today's forces. This partially relates to the long-standing problem of the Army needing many relatively small items, in contrast to ship and aircraft procurement in the

Navy and the Air Force. It also is the result of the deliberate path of Force XXI development: brigade-division-corps-army. On the positive side, the Advanced Warfighting Experiment (AWE) in March 1997 provided a focus for OSD leadership on the modernization activities in the Army.

With regard to openness, the Army representatives felt that, although there was an opportunity for participation in all of the panels, the process of option generation in the Joint Staff and in OSD was often closed. Particularly in the endgame, there was little opportunity to examine options before they were presented to senior decisionmakers. The Army, more than the other services, found the QDR participation and preparation activities very demanding on the headquarters staff, which also needed to continue to support the other Planning, Programming, and Budgeting System (PPBS), operations, and acquisition processes.

Notwithstanding the previously mentioned concerns, the Army was generally very pleased with the outcome of the QDR. Throughout the fall of 1996 there was a lot of discussion of using the Army force structure as a billpayer to fix modernization shortfalls with two active divisions as the quid pro quo. The actual, more-modest reductions were spread across Active Component (AC), Reserve Component (RC), and civilian end strength, a much smaller price than had been anticipated.

On the other hand, the QDR exacerbated a serious problem between the AC and RC. The Army has by far the largest reserve components of any of the services, and the utilization, integration, and modernization of the reserve were not explicitly addressed. The bill for modernizing the total force far exceeds resources that are likely to be available. The Army has employed a process of flowing equipment from higher priority units down to lower priority units as new capabilities enter the force. Since later-deploying forces (primarily RC) have older equipment, they are not compatible with first-to-fight units and are viewed as less relevant. Modernization funding, even for the active force, will remain a problem, particularly in the years immediately following the FYDP, and the need to fund modernization may require further force structure reductions. Most of the combat units in the National Guard have been associated with a "strategic reserve," but the QDR strategy did not specifically address its role or size. Since RC proponents saw the QDR manpower reductions as unfair,[7] additional cuts will be problematic.

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[7]"The Army's Civil War" (1997).

Service Perspectives

- **Navy**
  - **Representation of Capabilities**
    - Focus on demands of current operations reinforced Navy case for forward presence and capabilities of deployed task forces
  - **Openness of Process**
    - Less vocal about concerns but did not expect major consequences from QDR activities. Only minor concerns about openness
  - **Satisfaction with Results**
    - Since services were essentially permitted to solve their own problems, it was viewed as a limited success

The Navy fared quite well in the QDR, since internal reviews prior to the QDR had examined the resource challenges of the FYDP and had permitted high-level consideration of realities and alternatives for solving its own problems. As long as the QDR did not result in a net loss of Department of the Navy (DoN) resources, it would be viewed as satisfactory.

The QDR strategy with its emphasis on full-spectrum capabilities was consistent with the Navy's view of the demand for military forces. The Navy has had years of experience with routine overseas deployments and was well prepared to explain how the current policies evolved and the risks associated with exceeding reasonable limits.

The Navy did not expect major changes from the QDR and was not surprised at the outcomes. It participated in the various QDR forums but treated the process in a more routine way than some of the other services. Since the results were consistent with decisions the Navy was prepared to make, the outcomes were, for the most part, acceptable, and the QDR was viewed as a limited success.

Service Perspectives

- **Air Force**
  - **Representation of Capabilities**
    - Serious concerns about representation of the potential of airpower. Models did not adequately support emerging new capabilities, and concepts of operation did not reflect Air Staff preferences.
    - DC games and readiness analysis did show how heavily air forces are commitment to shaping activities.
  - **Openness of Process**
    - Major concerns about conduct of campaign analyses and endgame decisions on allocation of reductions
  - **Satisfaction with Results**
    - Although no major programs were canceled and the need for F-22 and JSF was firmly established, the QDR was viewed as a lost opportunity.

The Air Force was the service least satisfied with the QDR outcomes. There is a widely shared view in the Air Force that a revolution in warfighting has already occurred with the advances in precision targeting, surveillance, and stealth, and air power must therefore play a much more decisive role in future conflict. Because the combat models used in the QDR did not reflect the perceived new dynamics of combat, they undervalued the contribution of air power and retained an emphasis on the status quo. These concerns were primarily associated with warfighting activities, but there also was concern that the Dynamic Commitment games did not reflect the level of activity that the Air Force has experienced over the past few years.

Because of the QDR's dependence on Cold War combat models and their use in supporting alternatives that were presented in the endgame decision meetings, the Air Force felt that the process was not open and equitable.

Although some would view the QDR as successful for the Air Force because both the F-22 and JSF were firmly established as part of the tactical air (TACAIR) modernization package, the general view in the Air Force was that the QDR was a lost opportunity to step up to the implications of the changes that have occurred and to fund these

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programs adequately even if it meant reducing force structure in other services.[8]

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[8]James Kitfield (1997) has said that

the QDR released earlier this year provoked more complaints than usual from Air Force officials. They protested that the Air Force was being targeted for disproportionate cuts and that the service wasn't getting the benefits it deserved for its high-tech focus and power-projection capabilities.

Service Perspectives

- **Marine Corps**
  - **Representation of Capabilities**
    - Very satisfied with visibility and relevancy of MEUs in SSCs and shaping
    - Experimentation and new concepts built image of innovation and flexibility
  - **Openness of Process**
    - Most vocal about agendas that were not based on real-world requirements. Options were neither generated nor examined in task forces
    - Satisfaction with Results
    - Because senior military leadership was able to gain control in end game, outcomes were acceptable if not remarkable
    - V-22 acceleration an unanticipated bonus

The Marine Corps also faired quite well in the QDR. The QDR strategy requires capabilities long a part of the Marine Expeditionary Unit (MEU)–Marine Expeditionary Brigade (MEB)–Marine Expeditionary Force (MEF) force packaging concept. Marine forces were seen as flexible, and the combat development initiatives, such as Sea Dragon and Urban Warrior, were seen as forward-looking and consistent with the need to "Prepare Now."

Because the QDR objectives were not clearly stated, some believed that there were hidden agendas to find rationales to support favorite programs or concepts. The questionable analytic basis for some of the options presented to the senior leadership in the endgame reinforced these fears. Nevertheless, the outcomes for the Marine Corps were acceptable, if not remarkable. The endgame tinkering with aviation accounts did result in an unanticipated increase in the buildup to full production of the V-22.

Outsider Perspectives

- **National Defense Panel**
  - Another step down the evolutionary path away from the Cold War
  - Puts OSD leadership on record as fully supporting deep cuts in infrastructure
  - Should have provided greater emphasis on longer term
  - Skeptical about affordability of planned modernization
- **Congress**
  - **Sen. Lieberman**
    - Does not live up to high expectations
    - Provides much more comprehensive view of our future strategic environment
    - Some significant steps forward in beginning to deal with management improvements
    - Report represents a "salami-slicing" approach
  - **Rep. Spence**
    - Long on commitments and short on resources
  - **Rep. Skelton**
    - I just don't see any more base closings

Outsiders were predictably critical of the QDR. Those who looked for justification for significant increases in the defense spending were not satisfied and neither were those favoring radical changes to embrace the "Revolution in Military Affairs" wholeheartedly.

Outline

- **Background**
- **Joint Staff QDR Activities**
- **A Range of Viewpoints on QDR**
➤ • **Using Issues as a Basis for Analysis**
- **Conclusions and Insights for Future Reviews**

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4. USING ISSUES AS A BASIS FOR ANALYSIS

This section describes the process of identifying, cataloging, and analyzing QDR issues. Although this QDR did not seriously attempt to integrate issues, future reviews could benefit from an understanding of why some issues did not come to closure and how the issues relate to operational missions and institutional functions. It may also suggest better organizational structure for future reviews.
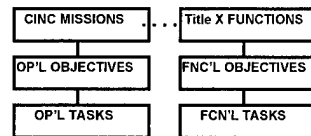
RAND Support for JROC/JWCA

- **Developed Objectives-Based Resource Management (OBRM) framework to assist in integrating issues**
  - Specifies CINC missions, Operational Objectives, Operational Tasks
  - Provides basis for assessing current and future capabilities
  - Consistent with UJTL/JMETLs but focused on more manageable (smaller) set of activities that include full spectrum of operations
- **Adjusted framework as QDR unfolded to address institutional functions of the services (Title X) in addition to joint operations**
  - Changes necessary to address infrastructure issues

Pre-QDR Framework

CINC MISSIONS

OP'L OBJECTIVES

OP'L TASKS

Post-QDR Framework

| CINC MISSIONS | ... | Title X FUNCTIONS |

| OP'L OBJECTIVES | | FNC'L OBJECTIVES |

| OP'L TASKS | | FCN'L TASKS |
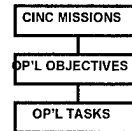
As previously noted, RAND has supported J-8 in developing a framework to assist in integrating issues that arise in the JROC/JWCA process. The framework provides a manageable set (about 100) of CINC missions, operational objectives, and operational tasks. The operational objectives are linked to the missions that they support, and the operational tasks define the necessary actions to achieve an objective. The framework has evolved as it has been applied to planning and programming support for U.S. Special Operations Command, U.S. Forces Korea, the Joint Staff, the Army, and the Air Force. (Lewis et al., 1996; Schwabe, Lewis, and Schrader, 1996.)

The structure was based on the Uniform Joint Task Lists (UJTLs) and the Joint Mission Essential Task Lists (JMETLs) used by J-7 and the CINCs to identify and document training and exercises. The UJTLs have evolved and will continue to change, along with our framework, as they are used and reviewed. The RAND framework (OBRM) does not contain the detail of the UJTLs/JMETLs or the procedural tasks that are an important part of the UJTLs/JMETLs. The purpose of our framework is to capture succinctly all the important capabilities the CINCs demand to facilitate grouping of related programmatic issues.

The QDR Support Team initially believed that there would be management and integration of the issues being studied in the QDR and

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felt that the OBRM framework would be useful in supporting that integration. In the event, the QDR activities were not integrated, but it appeared that there would be utility, for follow-on analysis, in linking QDR issues to the framework. As the process of analysis began, it became clear that an operational framework, although useful for the JWCA warfighting analysis, was not sufficient to capture the range of issues assigned to the QDR. In particular, a separate class of activities associated with the functions assigned to the services and defense agencies needed to be included. After reviewing these functions (DoD, 1987), we chose a set of eight that captured the major support activities:

- Acquire and manage personnel

- Train individuals and units

- Acquire weapons and equipment

- Maintain installations and facilities

- Provide logistic support

- Organize and manage forces

- Develop C^3I capabilities

- Provide medical care.

A set of functional tasks was developed for each of the functional objectives. They may be useful for more detailed examination of infrastructure issues, but these eight functional objectives appear to be adequate for high-level reviews, such as the QDR.

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│              Issue Review by CINC Mission                             │
│                     (Mission Unique)                                  │
│  ─────────────────────────────────────────────────────────────────   │
│            Examples of issues - more complete list in backup charts   │
│                                                                       │
│   •  Deter and defeat attacks on the U.S.                             │
│        -- Increase emphasis on homeland defense                       │
│   •  Deter and defeat aggression against friends and allies           │
│        -- Assess joint capability to fight and win two near-simultaneous MRCs │
│   •  Protect the lives of U.S. citizens in foreign locations          │
│        -- No unique issues; always addressed in conjunction with other SSC activities │
│   •  Underwrite and foster regional stability                         │
│        -- Identify requirements for overseas presence                 │
│   •  Counter regional threats from WMD                                │
│        -- Increase investment in capabilities to prevent use of and defend against chemical and │
│           biological weapons                                          │
│   •  Deter and counter terrorism                                      │
│        -- No unique issues; always addressed in conjunction with other SSC activities │
│   •  Provide humanitarian and disaster relief                         │
│        -- Examine humanitarian assistance/disaster relief requirements │
│   •  Counter production and trafficking in illegal drugs              │
│        -- Examine counter-drug operations requirements                │
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Each of the QDR issues identified in the Joint Staff briefings was linked to any and all CINC missions that were directly influenced by that issue. The process was necessarily subjective, and subsequent Joint Staff analysis of the data may lead to refinement of the issues and the linkages. This slide presents examples of issues in each of the mission areas. Appendix B includes a more detailed list of issues for each area.

Although two mission areas, "protect the lives of U.S. citizens in foreign locations" (including Noncombatant Evacuation Operations [NEO]) and "deter and counter terrorism," are clearly included in the National Military Strategy (Shalikashvili, 1997, pp. 16–17), we could find no issues uniquely associated with these operations. During the QDR, these missions were subsumed within the broader category of SSCs. The assessments revealed that, at this point, no requirements were unique to these missions. We would argue that, as these missions become better defined and understood, mission-unique mission requirements will emerge.

Issue Review by CINC Mission
(Recurring Themes)

- **Strategy**
  - Describe acceptable levels of risk
  - Develop an information assurance strategy
  - Develop an integrated counter-NBC strategy
- **Requirements**
  - Develop recommended core capabilities with rationale
  - Identify "unused" forces
  - Examine transition between levels of engagement
  - Address future capabilities
  - Provide information protection
  - Assess alternative force structures ability to support strategy
- **Resources**
  - Hedge against emergence of a "peer competitor"
  - Develop TACAIR modernization alternatives
  - Identify infrastructure to support engaged forces

In addition to issues that were uniquely associated with a specific mission, a number of more general, operational issues recurred and therefore may deserve special consideration. These can be broken into three categories: those either part of a more complete strategy description or in which a strategy was lacking, those associated with specifying requirements for capabilities, and some high-level resourcing issues. The assignment of issues to these categories is somewhat arbitrary, but the issues themselves need to be addressed in subsequent reviews. We would argue that several of the "issues" are not real issues in that they can be analyzed and that alternatives can be proposed within an operational context; rather, many are study topics, areas of interest, and staff actions. For example, a QDR operational issue was the transition between levels of engagement. On the other hand, addressing future capabilities was a broad topic that was not sufficiently defined within an operational context.

Issue Review by Service Function
(Function Unique)

Examples of issues - more complete list in backup charts

- **Acquire and manage personnel**
  - Examine implications of level of effort for current operations of the All Volunteer Force
- **Train individuals and units**
  - Examine innovative training concepts to reduce the cost of readiness
- **Acquire weapons and equipment**
  - Resolve BUR criticism of funding proposed for recommended force levels
- **Maintain installations and facilities**
  - Assess where infrastructure efficiencies could produce savings for modernization
- **Provide logistics support**
  - Increase logistics outsourcing and privatization
- **Organize and manage forces**
  - Size forces for shaping activities and smaller scale contingencies
- **Develop C3I capabilities**
  - Consolidate Defense Information Systems Agency (DISA) megacenters
- **Provide medical care**
  - Reduce medical establishment to the operational mission

Functional support issues can also be assigned to one or more of the eight Title X functional categories. Examples of issues arising in a single area are shown in the slide. More complete lists are included in Appendix B.

Evolution of Selected Issues
(Overview)

- **Joint Warfare Capability Issues**
  - Develop recommended core military capability with rationale
  - Identify "unused forces"
  - Assess capability to fight and win 2 near-simultaneous MTWs
  - Hedge against emergence of a near-peer competitor
  - Increase emphasis on defense of homeland
  - Understand PERSTEMPO and OPTEMPO stress points
- **Title X Issues**
  - Scrutinize Infrastructure
  - Change active-reserve mix
  - Increase outsourcing and privatization

To assist the post-QDR analysis process, we have selected a set of nine representative issues that, in general, were not settled by the QDR or will require continued review. The evolution of each of these issues is included in Appendix A, but an example of the review follows.

Evolution of Selected Issues
(Capability Issue #1)

Example of an issue - more complete review in backup charts

- **Develop recommended core military capability with rationale**
  - First issue raised by Joint Staff in kicking off QDR
  - Resolution would require integration and trade-offs among supporting analytic groups
  - QDR answered question for the near term, concluding today's forces were "about right," but provided little guidance to prioritize future capabilities or restructure future forces
  - May be the best outcome given lack of widely accepted threats and lack of pressures to reduce defense spending significantly

The first issue the Joint Staff raised in preparing for the QDR is at the heart of the defense planning and programming analysis process. If the Joint Staff, working with the services, can define an easily understood set of core capabilities linked to the National Military Strategy before the next major defense review, they could be used as an organizational framework for analysis and a structure for decisionmaking. The BUR was criticized for its overdependence on "military judgment," and the QDR necessarily fell back on it to find today's force structure to be "about right." The next time, the final decisions will be more supportable if they can better explain why the structure is "about right."

5. CONCLUSIONS AND INSIGHTS FOR FUTURE REVIEWS

This section summarizes the findings of the research and suggests a number of issues that the Joint Staff and DoD leadership need to consider before embarking on another major review.

Post-QDR Scorecard

Congressional Questions	Extent of Review	Focus	Comments
Threats and Scenarios	Focus on low end	Near-term	Definitions have changed
Assumptions	Narrow	Near-term	Very conservative
Strategy and Force Structure	Broad	Near-term	Little insight for future forces
MOOTW and Peace Operations	Broad	Near-term	Didn't address how well we do
Technology Advancements	Narrow	Mid-term	Limited linkage to force structure
> 120 Day Conflicts	Narrow	Near-term	ARNG availability and effectiveness?
Reserves	Very Narrow	Near-term	ARNG equipping bills?
Tooth to Tail	Comprehensive	Near-term	Major decisions deferred
Airlift and Sealift	Narrow	Mid-term	Need to revisit MRS-BURU
Forward Presence, PREPO, Deployed Force	Broad	Mid-term	
Resources Must Be Shifted Between Theaters	Narrow	Near-term	Little change from BUR
Revisions to the UCP	Narrow		Not seriously addressed
Our Questions (Joint Staff)			
Infrastructure	Comprehensive	Near-term	Major decisions deferred

Key:	Broad—Extensive Comprehensive—Full range of issues Narrow—Limited focus	Timeline:	Near-term-Current FYDP; Mid-term-FYDP + 5 yrs; Far-term-2010 & beyond

This scorecard uses the questions listed by J-8 in October 1996 in identifying where issues were to be examined to comment on the extent of the QDR review, the time frames considered, and summary remarks. The three questions that were treated most extensively have all been previously discussed in some detail, but they all are associated with the nature of the operations our forces are asked to perform. The full spectrum of operations, from forward presence to MTWs, was described in great detail.

Among the weakest areas was the treatment of reserve forces and their role in the strategy. The utilization of reserve forces focused almost exclusively on the Army. The issue emerged as part of the Army's responses to the force structure and readiness panels issues. The Army argued the need for additional active structure to meet its various deployment requirements, but did not sufficiently address utilization of its reserve component and its readiness levels. This weakness has contributed to the public debate on the relevance of Army National Guard and Army Reserve units. Infrastructure was also a problem. Even though the infrastructure panels performed a relatively comprehensive analysis, the lack of strategic direction and difficult external constraints resulted in most decisions being deferred to the Defense Reform Panel.

The QDR focused on the near term much more than some would have expected for such an extensive review. However, the Lieberman amendment language provided a shorter-term emphasis for the Pentagon review and charged the NDP with responsibility for looking at the longer term.

Conclusions

- **The QDR provided short-term fixes and a better context for developing long-term solutions to growing fiscal problems**
    - Demand for a full spectrum of capabilities
    - Need to consider impact of operations on personnel and equipment
    - Need to examine joint concepts for future operations
- **QDR exposed inadequacy of analytic tools**
    - Participatory structured analyses (Dynamic Commitment) are promising
    - Campaign models of limited utility
    - Top-down guidance and feedback is still necessary for success
- **Forcing functions are needed to avoid only marginal changes**
    - External (White House or congressional) and
    - Internal (SecDef or JCS)
- **Relationship and responsibilities of JS and OSD remain ill-defined**

The QDR can be viewed as meeting the letter of the law by delivering a report on time that addressed most of the issues the Congress raised. On the other hand, the solutions presented were short-term fixes (such as adjusting fighter procurement funding in the FYDP, leaving open the question of the outyear bow wave). Nevertheless, the QDR was successful in defining the full dimensions of the demand for military capabilities, which should provide a good starting point for future reviews.

The QDR also highlighted the effect that current operations were having on personnel and equipment. Ameliorating this effect has caused a migration of modernization funding into Operations and Support (O&S) accounts. By emphasizing the consequences of strategy decisions, more robust solutions to these emerging problems may be found.

The strategy debate described what our forces need to do, but the important question of "how to do it" remains. Joint concepts for future operations are only beginning to be developed, but until we agree on how we are going to fight **jointly,** we cannot decide which systems to buy and where to divest.

Probably to no one's surprise, the QDR exposed the inadequacy of our analytic tools for examining almost any of the QDR issues. This will be discussed in more detail later in this assessment. Modeling and

simulation grew up in DoD, but the processes we model are not like industrial processes that are routinely validated on the factory floor. We can anticipate asymmetric threats and their general nature, but we cannot accurately predict how or where they will be employed. Since we are not talking about profit and loss statements, but must deal with the casualties of even a limited war, there is an understandable reluctance to move away from concepts that have worked in the past. However, our existing combat models did not do very well in predicting the outcomes in the Gulf War, and they have not changed in ways that build confidence in their predictive ability for future wars.

There is some good news on the analytic front. The structured participatory analysis that emerged in the Dynamic Commitment games may be particularly useful in developing and examining future joint concepts of operation.[1] This is not the unstructured BOGSAT (bunch of guys sitting around a table) but an activity that can be prepared for, with rules and management. The output may be insights for the participants and a focus for subsequent experimentation, rather than detailed measure of effectiveness charts with optimal solutions, but it is much more supportable than judgments arrived at behind closed doors.

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[1] The Dynamic Commitment games will be described in greater detail later in this briefing. The concept of the games was to provide a structured process by which the players could propose what capabilities would be provided and their availability to meet various CINC operational requirements based on different scenarios.

Implications for the Joint Staff

- Effective integration requires service acceptance of expertise in Joint Staff for examining joint concepts of operation
    - Services will develop new systems, but their utility can only be assessed in a joint operational context
    - Resourcing implications of new concepts must be addressed in a joint context
- Joint Staff responsibilities have evolved beyond just operational requirements
    - Capabilities provided by services and defense agencies are linked to operational effectiveness
    - Balance of resource allocations among force structure, modernization, readiness, and infrastructure must be addressed from a current and future operational perspective
    - A "Toolbox" of analytic capabilities is necessary
    - Modeling and simulation process improvements should be focused on joint operations
    - Structured wargames, spreadsheet models, database analysis, and simulations all have a role
    - JS should serve as an honest broker using service models when appropriate

The Joint Staff was a major player in the QDR but did not play an effective role in integrating the QDR activities, even within the realm of joint military operations. The problems that contributed to the need for a QDR arose from service enthusiasm for new systems that will enhance their individual roles. What is needed is a neutral broker with operational expertise and an analytic approach to place new systems and their capabilities in context. Without Joint Staff leadership, the option-generation and decision criteria for major issues will remain in PA&E by default.

The role of the Joint Staff in resource decisionmaking has moved well beyond the days of rubber-stamping services' designs for new systems. The major new piece is the influence of infrastructure costs on the ability to operate and modernize warfighting capabilities. Balance across the four major categories of force structure, modernization, readiness, and infrastructure must be addressed by the senior military leadership in a joint context. Current capabilities need to be compared with potential future capabilities to inform the civilian leadership of opportunities and risks.

In addition, the J-8 in particular should encourage the development of a toolbox of analytic capabilities that can be drawn upon to support resource decisionmaking. The tools do not need to be owned by J-8, as

long as there is institutional knowledge of their capabilities and limitations. What is meant by the concept of a toolbox of analytic capabilities is that there are a variety of analytic tools from which the Joint Staff could draw. The toolbox could contain spreadsheets, large databases, simulations, etc. The many pieces used in the QDR—structured war games, spreadsheet models, database analyses, and simulations—all have a role in future reviews, but we need to begin to prepare now with analytic designs for anticipated classes of issues that will continue to arise. These tools formed the initial elements of the toolbox concept. Service-owned models can certainly be considered as part of the toolbox, but the Joint Staff should be able understand when they are appropriate and sufficiently insightful.

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│              Planning Considerations                          │
│                 for the Next QDR                              │
├─────────────────────────────────────────────────────────────┤
│                                                               │
│  • Need to strengthen existing organizations and support      │
│    processes                                                  │
│      – Acknowledge the need to generate options and to "neck-down" sets │
│        of alternatives during the process                     │
│          · Use JROC to review options and to recommend decisions to an │
│            empowered, small integration group                 │
│          · Relay integration decisions to task forces to adjust starting sets of │
│            assumptions and update analysis based on emerging realities │
│          · Use parts of QDR support structure to address specific sets of issues │
│            throughout intervening years                       │
│          · POM reviews after programs are built and internally balanced generate │
│            inefficiencies and unnecessary turbulence          │
│          · Tough choices to implement new joint concepts of operation should not │
│            be made at acquisition process milestones          │
│          · Use (but modify) JWCAs and JRB as shadow QDR organization │
│      – Suggested actions will assist in implementing Joint Vision 2010 │
│          · May help to translate broad themes into specific programmatic actions │
│                                                               │
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The next QDR could benefit from a management-level review of what did and did not work to identify the organizations and processes that were successful and to build an understanding of what did not work and why. In the recent QDR, too many decisions were carried forward to the endgame, and they were at all different analytic levels. For example, the SecDef was addressing both force structure size and potential cuts concurrently with discussions on the sufficiency of the individual service modernization programs. The cross-cutting elements of these topics were often not clear; thus, decisions were often based on single-point solutions for which the ramifications were not obvious. If options are generated early in the process, shared with the leadership, and used to limit the number of alternatives that are examined in detail, it will be possible to focus the bulk of the analysis on important distinctions. The JROC could serve as a screening mechanism suggesting when interrelated sets of issues are ready for SecDef decision. A small, empowered integration group (possibly the vice chairman and the DepSecDef) would make the tough decisions, and their actions could then be fed back down to the working groups, so that plans for analysis and key assumptions could be changed as necessary.

A shadow QDR structure built on such existing processes as JROC, Joint Requirements Board (JRB), and JWCA could be used to begin to examine interrelated sets of issues that are likely to arise in conjunction with

modernization. The focus should be on reviewing current and future joint concepts of operation to understand the potential impact of new capabilities. It is inefficient to make major program decisions after service POMs have been built and balanced across all Title X responsibilities. Case-by-case decisions at major acquisition milestones also are inefficient because they may not adequately address alternative ways to accomplish objectives. Instead, systems and their roles in systems of systems need to be addressed in a joint operational context. These reviews of concepts would then provide the basis for POM development and acquisition management.

A focus on joint concepts of operation will provide the added benefit of "operationalizing" the themes of Joint Vision 2010 by providing concrete examples of how Dominant Maneuver and Focused Logistics will be achieved (and when).

Suggested Organizational Framework

Develop a more structured capability review process based on QDR lessons learned to prepare for the next defense review and to implement Joint Vision 2010

I. Determine capabilities required by strategy (J-5)

- This is "What" forces are expected to do
- Should be organized using CINC missions

II. Identify and catalog operational concepts for achieving operational objectives (J-3, J-7, JWFC)

- This is "How" forces jointly accomplish tasks
- Both current and emerging concepts are relevant

III. Assess expected performance (J-8)

- This is "How Well" joint forces perform
- Assessment will generate issues for JROC, CPA, CPR and next QDR
- Continue to identify and nurture a set of analytic tools to support the assessment process

Finally, a creative tension needs to be fostered among three groups of experts on the Joint Staff working with the CINCs and the services. One group would focus on identifying what our forces are going to be asked to do, the second group would explain how those objectives might be achieved, and the third group would generate sets of alternatives, assess their cost and risk, and maintain a set of tools for analysis.

The first group can logically be organized around the J-5 and the Operations Deputies (OPSDEPs) to translate the demands of the National Security Strategy and emerging security environment into operational objectives and high-level tasks. This process is relatively well defined and captured in the new JSPS.

The second group would be centered around the J-3 and the OPSDEPs, but their sights need to be lifted from their historical emphasis on current operations to a partnership with others (perhaps J-7 and the Joint Warfighting Center [JWFC]) to consider a range of future joint concepts. This is probably the hardest part, since future concepts will determine future roles and missions. For example, the broader acceptance of the Air Force's "halt phase" for MTWs could have implications for the Army and its role as an early-entry force in an MTW. To retain an important role, the Army needs to propose and adopt new concepts for how it might deploy sooner and with sufficient firepower. The debate and assessment over the

robustness of Air Force and Army concepts should be done within the context of joint operational capabilities. It might be that a joint concept emerges for a halt phase that necessitates utilization of both Air Force and Army capabilities. That concept needs to be assessed and defined within the Joint Staff, not within the proponent service organizations. Without a reorganization of the Joint Staff to provide the necessary expertise in one directorate, it may be necessary for the Director of the Joint Staff to manage a cross-cutting Joint Concept Review Group.

The third group is logically the J-8, with a charter to generate and evaluate alternatives that include consideration of readiness and infrastructure options. J-8 should challenge the other two groups to be bold in considering change. However, the analysts should resist the temptation to generate concepts or strategy options. Their role should be to evaluate.

Many of the suggested actions to prepare for the next QDR are already under way. They should be encouraged by occasional leadership reviews of the state of the toolbox and an examination of major issues in a QDR context. Indifference or an attitude of "at least that is now behind us" will only minimize the role of the Joint Staff in future reviews. On the other hand, a serious program to build capabilities and to assume responsibilities will ensure that military judgment is translated into effective advice.

APPENDIX A. SUMMARIES AND ANALYSIS OF ISSUES

The following series of vugraphs expand on the QDR issue analysis by presenting more complete lists of issues found in the database and their associated missions and functions. It also presents comments on the evolution of nine selected capability and Title X issues.

Why Issues?

- **The questions that led to the need for a QDR can be viewed as a diverse set of issues to be resolved by DoD, White House, and/or Congress:**
    - Do we need more B-2s?
    - Has force structure been reduced too much?
    - When do we need National Missile Defense?
    - Is military pay adequate?
    - What capabilities can we get from our allies?
- **However, issues must be placed in context and the impact of decisions must be illuminated**
    - OBRM framework provides a mechanism to link issues to operational and institutional objectives
    - Tracking the evolution of issues in the QDR can provide insights on the process and required capabilities

RAND's previous work with the JWCAs showed that, although a framework for defense planning was useful, its utility would be judged on how well the framework helped in providing answers to the many issues (policy, programmatic, and operational) that arise on a daily basis. Senior leaders in the Pentagon are constantly faced with such issues as whether we need more B-2s, whether force structure has been reduced too much, when we need to deploy a National Missile Defense (NMD) system, adequacy of military pay, and what capabilities we can get from our allies.

These issues can be dealt with individually, but decisions on individual issues may affect other capabilities or policies. A better approach would be to link issues with capabilities routinely by considering the objectives that are affected by a particular issue. Programs and policies are only important as they contribute to achieving objectives associated with the National Military Strategy. In addition, there are institutional issues, broadly supporting operational capabilities that are more effectively treated with a functional framework. Institutional issues can be linked to functional objectives and tasks as the primary mechanism for resolving them. However, the functional objectives and tasks are not ends in themselves. If the function does not contribute to operational effectiveness, it should not be resourced.

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│              Issue Review by CINC Mission                         │
│                    (Mission Unique)                               │
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│                                                                   │
│   •  Deter and defeat attacks on the United States               │
│        – Increase emphasis on homeland defense                    │
│        – Reconsider Nuclear Posture Review decisions              │
│        – Examine strategic force modernization alternatives       │
│        – Provide protection against a limited ballistic missile   │
│          attack                                                   │
│   •  Deter and defeat aggression against friends and allies       │
│        – Examine requirements for a "near peer" competitor        │
│        – Assess joint capability to fight and win two             │
│          near-simultaneous MRCs                                   │
│        – Develop anti-armor program initiatives                   │
│        – Rapidly assess results of engagement and reattack with   │
│          precision                                                │
│        – Increase capability to conduct attack operations prior   │
│          to missile launch                                        │
│        – Fight our way into a denied theater                      │
│                                                                   │
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Our review of issues begins with the examination of issues that can be uniquely associated with a specific operational mission. The first of these CINC missions is "deter and defeat attacks on the United States." This is the traditional home for our strategic nuclear forces and NMD initiatives. The increasing vulnerability of the homeland to a wide variety of threats (much more than just a massive nuclear attack) became an element of the QDR strategy. The central issue, if and when to deploy NMD, remains on the table. Similarly, the QDR provided further insights into the costs of continued compliance with the START II treaty, but the issue of the future direction of strategic forces remains unresolved.

The second CINC mission is "deter and defeat aggression against friends and allies." This is the mission that received the most attention in the BUR. In addition to analysis of two near-simultaneous MTWs, this cluster of issues now includes greater emphasis on support requirements and the role of RC forces. The warfighting capabilities required to support this mission remain a central element of defense planning, but it is no longer the principal basis for force sizing.

Issue Review by CINC Mission
(Mission Unique)

- **Protect the lives of U.S. citizens in foreign locations**
  - No unique issues; always addressed in conjunction with other SSC activities
- **Underwrite and foster regional stability**
  - Identify requirements for regional engagement
  - Identify requirements for overseas presence
  - Identify requirements for peace support operations
  - Examine alternative postures for forces stationed and deploying overseas
  - Examine requirements for SSC follow-on operations
  - Fund contingencies to prevent migration of modernization funds
  - Sustain peacetime engagement within acceptable OPTEMPO/PERSTEMPO levels
  - Conduct a wide range of training exercises with friends and allies

The protection of U.S. citizens in foreign locations is clearly an enduring mission for our combatant commanders. However, the QDR treated capabilities in this area under the broader rubric of SSCs. No unique issues related to personnel protection arose in our review.

The "underwrite and foster regional stability" mission achieved special prominence in the QDR. The BUR, at least for naval forces, accepted the requirements of overseas presence as a basis for force sizing. In the QDR, this set of "shaping" activities received detailed review. The readiness implications and the OPTEMPO were examined by the panels and through special activities, such as the Dynamic Commitment games. Many requirements were addressed in the QDR, but there was little guidance for prioritizing among the many objectives and tasks. We can expect these issues to reemerge in any subsequent reviews.

Issue Review by CINC Mission
(Mission Unique)

- Counter regional threats from WMD
  - Examine counterproliferation operation requirements
  - Define readiness for asymmetric threats
  - Increase investment in capabilities to prevent use of and defend against chemical and biological weapons
  - Develop and deploy a multi-tiered theater air and missile defense architecture
  - Institutionalize counterproliferation as an organizing principle in every facet of military activity
- Deter and counter terrorism
  - Reduce American vulnerability to terrorist attacks
  - Enhance both antiterrorism and counterterrorism capabilities
  - Reassess the vulnerability of DoD facilities at home and abroad

A mission that represents an increasing concern is "Counter regional threats from weapons of mass destruction." In the past our strategy focused on deterrence to counter WMD, but the QDR and other reviews have shown that old concepts may not work in the future. As a result, counterproliferation and protection have increased in importance.

"Deter and counter terrorism" has both foreign and domestic components. The full spectrum of demands for capabilities will continue to include a review of the objectives and tasks that military forces are expected to perform along with other agencies. This mission is an important part of the Joint Vision 2010 new operational concept "Full dimensional protection."

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|            Issue Review by CINC Mission                      |
|                  (Mission Unique)                            |
|--------------------------------------------------------------|
|                                                              |
|   • Provide humanitarian and disaster relief                 |
|      – Examine humanitarian assistance and disaster relief   |
|        requirements                                          |
|   • Counter production and trafficking in illegal            |
|     drugs                                                    |
|      – Examine counterdrug operations requirements           |
|                                                              |
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The "provide humanitarian and disaster relief" mission requires military capabilities that may require specialized packaging and training. These missions will never be the principal criterion for developing forces, but they will define requirements against which capabilities will be assessed.

"Counter production and trafficking in illegal drugs" is a continuing mission that received only marginal treatment in the QDR. Since these operations can be considered as part of the SSCs, they were addressed in the QDR as parts of larger aggregations of activities.

- Acquire and manage personnel
  - Define OPTEMPO and PERSTEMPO rules
  - Describe rotation policy for peacekeeping operations
  - Examine implications of level of effort for current operations of the All Volunteer Force
  - Reduce endstrength to reflect operating efficiencies, advanced technologies, and new CONOPs
  - Reassess military and civilian pay, benefits, and entitlements
  - Analyze cumulative effects of repeated reserve mobilizations
- Train individuals and units
  - Increase joint use of ranges
  - Examine innovative training concepts to reduce the cost of readiness
  - Increase use of embedded training and simulators
  - Develop joint training initiatives
  - Improve counterterrorism training and technologies

As previously noted, the QDR established the need for an integrated approach to infrastructure issues. Our taxonomy of eight functional areas as collectors for infrastructure issues is in its formative stages. The above functional objectives are based on DoD organizational issues as identified in a number of areas and summarized in the SecDef's report (Cohen, 1997). They were selected to provide a logical grouping of related issues, but they will probably change as infrastructure issues are treated on a more regular basis by the JROC, JRB, and JWCA.

The first Title X functional objective is "Acquire and manage personnel." Obviously, all military operations depend on personnel to some degree, and the nature, pace, and location of operations influence acquisition and retention of personnel. The QDR raised personnel issues related to the availability of personnel given the rapidity of such operations as Haiti, Africa, and Bosnia. The high demand for certain types of personnel brought into question the DoD's personnel-management processes. This issue is currently being addressed within the individual military departments and has now also been associated with the retention problems in the Air Force and Army. In contrast with operationally related issues, the QDR also raised issues on the size and cost of the military and civilian support structure. We can expect the debate to continue on both the operational and support dimensions of personnel policy.

"Train individuals and units" is a functional objective that also has two dimensions. Are we doing our training right? And are we doing the right training? The first question relates to efficiency and effectiveness. The second relates to the activities we train for. The broad spectrum of activities considered as requirements in the QDR means that training policy and resources will need to be adjusted to match the new demands. Although training is primarily a service function, joint training is required for successful joint operations. The requirements for joint training and the impact of resourcing them on service training are issues of growing importance. The issues raised within the training functional areas are interesting in both their diversity and differing levels of policymaking. For example, the "increase joint use of ranges" issue is both a policy decision and a training issue, but addressing how ranges could be used for joint training could only be handled once a policy decision has been made concerning utilization of ranges. The examination of innovative training concepts is a study topic that really could not be sufficiently addressed within the context of the time frame of the QDR.

Issue Review by Service Function
(Function Unique)

- **Acquire weapons and equipment**
  - Resolve BUR criticism of funding proposed for recommended force levels
  - Need to build the force of the future
  - Rely on savings from acquisition reform to reduce the cost of modernization
  - Is current level of modernization adequate?
  - Reduce headquarters, acquisition, science and technology, and test infrastructure
  - Budget for risks in acquisition programs
  - Build a stable, sustainable modernization program
  - Reduce post-FYDP modernization bow wave
  - Insufficient minor procurement funding
  - Focus modernization to exploit the Revolution in Military Affairs

The "acquire weapons and equipment" function has its own community of processes and people. It is linked to operational issues through the capabilities that are demanded for joint operations. As with the training function, two types of issues are associated with acquisition: Are we doing it efficiently, and are we buying the right systems to support future joint operations? The efficiency dimension really needs to be addressed by the services with some policy help from OSD. However, the issues associated with what and how much to buy need to be addressed in a joint operational context after the services have developed their own initial concepts of operation.

Issue Review by Service Function
(Function Unique)

- **Maintain installations and facilities**
  - Can infrastructure efficiencies produce savings for modernization?
  - Conduct additional BRAC rounds
  - Increase installation support outsourcing
  - Recapitalize facilities
  - Defer environmental compliance
  - Reduce and eliminate active duty infrastructure support
  - Address O&S migration to current operations

"Maintain installations and facilities" is clearly a service function, except for DoD-wide activities and defense agencies, which are managed by OSD. Their operation has been the focus of efficiency activities for many years, but the many constraints on making significant changes have become problematic. The QDR reemphasized the importance of additional rounds of Base Realignment and Closure (BRAC) and additional privatization and outsourcing. Nevertheless, most of these issues will remain to be addressed again in future reviews.

Although there has always been some migration of procurement and research and development funds to pay bills for current operations, the QDR brought the issue into the forefront. By showing the recent trends and raising the unacceptable consequences of their continuation, stopping operations and support (O&S) migration may be viewed in retrospect as one of the major successes of the QDR.

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│              Issue Review by Service Function                    │
│                     (Function Unique)                            │
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│                                                                  │
│  •  Provide logistics support                                    │
│       --  Adopt radically different business practices for       │
│           logistics                                              │
│       --  Increase logistics outsourcing and privatization       │
│       --  Examine maintenance impact of repeated commitment      │
│           to SSCs                                                │
│  •  Organize and manage forces                                   │
│       --  Resolve BUR criticism of force levels to support       │
│           strategy                                               │
│       --  Size forces for shaping activities and SSCs            │
│       --  Reduce end strength to reflect operating               │
│           efficiencies, advanced                                 │
│           technologies, and new CONOPs                           │
│       --  Change the active/reserve force mix                    │
│       --  Shift additional resources to modernization from       │
│           end strength reductions                                │
│       --  Examine tiered readiness                               │
│       --  Current force structure is fragile                     │
│       --  Share the burdens of response among forces             │
│           deployed in all theaters                               │
│       --  Convert lower priority combat brigades into higher     │
│           priority CS/CSS forces                                 │
│                                                                  │
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"Provide logistics support" is another function for the services and defense agencies to scrub for efficiencies and to validate operational concepts for relevance in supporting current and future joint operations. The effects of these issues on operational capabilities can be assessed more easily than the broader installation issues. However, the significant resources committed to logistics must be carefully and regularly examined.

"Organize and manage forces" is a service function that is closely tied to current and emerging concepts of operation. Specific force levels and force structure are ends in themselves and only have meaning when matched with the demands for joint force capabilities. The QDR began with a perception in Congress and elsewhere that, in spite of the reductions already made, current total force posture was in excess of our valid operational requirements.[1] These concerns carried over to our readiness practices, which also contributed to the high levels of O&S spending. As previously noted, the QDR was successful in describing the

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[1] In the winter and spring of 1996, there was substantial debate in OSD and the Joint Staff concerning force structure. Much of the debate focused on whether the DoD had too much structure and how it was being utilized. The outcome of the congressional debate was the McCain white paper cited earlier. (See McCain, 1996, and Internal J-8 Working Papers, OSD Interviews, July 1997).

wide range of capabilities demanded by our strategy and in rationalizing the diverse approaches to readiness. On the other hand, force structure issues, particularly for active and reserve ground forces, remain as problems for future reviews.

Issue Review by Service Function
(Function Unique)

- **Develop C3I capabilities**
  - Examine media mix for owned/leased SATCOM & terrestrial communications services
  - Consolidate DISA megacenters
  - Examine inventory simplification
  - Develop an information assurance strategy
  - Evolve to more interoperable battle management systems
  - Expand the flow of intelligence information to all levels of the battlefield
  - Deliver information selectively to tactical commanders
  - Monitor foreign use of space assets
  - Develop the capability to protect our space systems
- **Provide medical care**
  - Impose fees for medical services for dependents
  - Reduce medical establishment to the operational mission
  - Increase outsourcing in the Defense Health Program

The "develop C^{3}I capabilities" functional area is a critical enabler for future joint operations. The issues addressed in the QDR fell into two categories: those associated with the efficient operation of the C^{3}I infrastructure and those associated with information required by the warfighter. The latter category has been an important part of the JROC-JRB-JWCA process since its inception and is central to the achievement of Joint Vision 2010. Structured, systematic addressing of the warfighter's information requirements must become institutionalized and effective.

DoD medical has been an issue of concern with the OSD and Joint Staff for a long time. The major issues associated with DoD medical care are listed above.

- **Develop recommended core military capability with rationale**
  - -- **First issue raised by Joint Staff in kicking off QDR**
  - -- **Resolution would require integration and trade-offs among supporting analytic groups**
  - -- **QDR answered question for the near term, concluding today's forces were "about right" but providing little guidance to prioritize future capabilities or restructure future forces**
  - -- **May be the best outcome given lack of widely accepted threats and lack of pressures to reduce defense spending significantly**

In addition to linking issues with their associated mission and functional objectives, we examined a number of issues that provide insights for planning support for future defense reviews. The first of these issues emerged in the first briefing presented to the service chiefs on the QDR. It addressed the central focus of the military response to the questions Congress raised: What core military capabilities are necessary and why? This is analogous to the long-standing resourcing question of "How much is enough?" There will never be a satisfactory answer to either question, but the QDR should provide better insights on how to approach the question and a context for explaining the requirements for military capabilities.

Resolving this issue requires integration across the multiple task forces and the examination of trade-offs and sets of alternatives. The startup phase of the QDR developed an organizational model for integration, but it was never effectively used.

Nevertheless, the QDR did provide answers to the questions Congress asked. For many reasons, the focus of the QDR was very much on meeting current demands; as a result, our current force structure was judged to be "about right." The judgement was based on sustaining the two near-simultaneous MTWs strategy and continuing to suppport the large number of SSCs and peacekeeping operations. The assessment did

not address how force structure requirements might change if new organizational and operational concepts were introduced. This response may be sufficient for this review, but it was not accompanied with detailed guidance on how this current force will be transformed to meet future requirements. Neither did the QDR address how planned and emerging future capabilities will be resourced.

As a result, the QDR may be viewed as a useful first step, given the current political and economic environment, but future reviews will almost certainly be held to a higher standard. We believe that an operationally based framework linking issues to objectives will help to address the pieces of the next QDR systematically. However, a framework only provides an organizational structure for assessment. The difficult integration of issues and subsequent assessment and development of options for management decisions must be done by analysts.

- **Identify "unused forces"**
  - Reverse side of analysis of forces required to accomplish CINC missions
  - Dynamic Commitment provided a basis for a more comprehensive analysis of shaping demands
  - MTW analysis relied heavily on current warfighting concepts with little focus on future concepts of operation
  - Nevertheless, the role of Army National Guard forces was clearly called into question. The QDR did not provide a rationale for a "strategic reserve"; although RC forces are used extensively in SSC missions and to provide CS/CSS for active combat units, there was almost no demand for ARNG combat forces

The reverse of the first selected issue regarding required capabilities is identifying those forces that cannot be tightly linked to potential CINC missions. The allocation of forces in a set of likely scenarios, as was done in the Dynamic Commitment games, is a useful way to gain insight on forces with the highest demands. By systematically examining the force elements underutilized or not used in current or projected operations, it is possible to flag units or skill groups that may be candidates for elimination or downsizing. Use or lack of use in specific scenarios is not the only basis for examining excess capacity. It is possible that units were sent to SSCs because they were available or because there was a need to share participation. The next review will need to examine how well forces were likely to perform and whether alternative (possibly smaller) units could have accomplished the assigned tasks.

In particular, the Army National Guard divisional combat forces, which in the past have served as a "strategic reserve," require rationalization in terms of the emerging new military strategy. To the extent that RC units are restructured and assigned to support current or new missions, the current active Army force structure will need to be restudied to identify units that have reduced utility. Since the affected forces are all Army forces, there will be pressure to keep the Joint Staff out of the review. However, the demand for capabilities comes from the CINCs, and the

Joint Staff must be involved in the process of assessing the effectiveness of the matching forces and requirements.

Evolution of Selected Issues
(Title X Issue #1)

- **Scrutinize Infrastructure**
  - Initial expectations for easy savings (based on DSB study) were unrealistic and as a result started the entire QDR on a false assumption
  - Although an elaborate analytic structure was established, the resulting fractionation led to advocacy groups rather than options and trade-offs
  - Lack of success in generating alternatives and structuring analysis led to deferral of serious changes and only minor opportunities to stem the migration of O&S funds
  - Basic issue of too much infrastructure and too little will to change remains unresolved

The biggest residual issue from the QDR is the review of DoD infrastructure. The QDR started with the burden of unrealistic expectations of savings, as a result of the DSB study predicting potential savings of $30 billion per year. As the QDR panels examined the DSB findings, it was clear that the majority of the anticipated savings fell into two categories that were not helpful for QDR rebalancing. First, the study pointed to many areas in which the services had already begun restructuring and implementing efficiencies. Second, the study identified savings that would have required congressional action that would be strongly resisted by many special interest groups and that was well outside the ability of the SecDef to control.

The organization of the QDR task forces also caused problems for the infrastructure review. The disaggregation of the infrastructure task force into smaller and smaller functional groups resulted in sets of like-minded advocates tasked with finding unrealistically large savings in their own programs. There needs to be more integration and examination of alternatives in force structure and modernization that would lead to changes in the need for the current infrastructure. Because changes in infrastructure and their impact on operational capabilities were not addressed in detail, the result was specific changes in only a few areas and the deferral of the more-difficult issues.

The QDR did provide a better understanding of the difficulty of changing infrastructure and a better realization of the costs, both real and opportunity, of continuing with business as usual. The new SecDef referred many of the infrastructure issues to his Defense Reform Panel, in part because the QDR analysis was inadequate from his perspective.

The issue of the capability of our forces to fight two near-simultaneous MTWs was a carryover from the BUR, where it was the central focus for capability analysis. The QDR, and its strategy based on the JSR, acknowledged that this was not the only basis for planning. However, it still is the principal mission driving modernization and force structure. Many models have been used, and strongly criticized, to assess campaign outcomes. The QDR explicitly addressed the effects of chemicals and varying involvement in peacekeeping activities on potential outcomes. Nevertheless, the same models, TACWAR in the Joint Staff and the Concept Evaluation Model (CEM) at the Army's Concepts Analysis Agency (CAA), were used with very conventional concepts of operation.

Even with the excursions that were considered and the near-term (2010) focus of the QDR, our overall capabilities for MTW scenarios were judged as quite robust. This is primarily because the basic conditions in Iraq and Korea have not changed, and our planned modernization significantly improves our capabilities.

Evolution of Selected Issues
(Capability Issue #4)

- **Hedge against emergence of a "near-peer" competitor**
  - Prudence requires consideration of threats beyond Iraq and North Korea, but current political and economic environment in Russia and China make it difficult to project them as serious threats requiring large U.S. ground forces
  - Uncertainty about future joint concepts of operation make analysis more difficult than for MTWs
  - WMD further complicate requirements analysis
  - QDR treatment of "near-peer" scenarios was weak
  - This issue will not go away, but resolution is not obvious

Because the previously discussed two-MTW scenarios were not particularly challenging, it was felt that our forces should be measured against a tougher threat. The term "near-peer" competitor emerged to represent a combination of economic strength, military technology and force structure, and interests hostile to those of the United States that, although it does not exist today, might emerge in the next decade or two. Political factors and the lack of evidence of intent limit our ability to be specific about the only two candidates that were identified as potential "near-peer" competitors in the future: China and Russia.

A true assessment of our capabilities against a near-peer competitor would require analysis of future concepts for joint operations. These do not exist, as each service pursues modernization plans that further its own objectives but do not address true jointness in warfighting. In addition, although we talk about asymmetric responses to our capabilities, it is difficult to model the effects of attacks on information systems or the consequences of the use of WMD to coerce our friends and allies.

Existing traditional campaign models, TACWAR and CEM, require extensive preprocessing and weapon system performance analysis, making it difficult to consider a range of hypothetical alternative locations and initial conditions for theater warfare. As a result, OSD used a more easily configured theater model, the Joint Integrated Contingency Model

(JICM), to examine some near-peer scenarios. These were first steps toward examining the high end of the spectrum of combat, but it was widely accepted that they provided few insights because the scenarios were contentious, as were the different values placed as service systems. The next QDR will need to be able to deal with high-end combat demands in a way that will hold up to external review. This does not necessarily mean that detailed high-resolution models are necessary. However, it does mean that there must be some analytic tools to build insights on requirements and risks in this area.

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│              Evolution of Selected Issues                 │
│                  (Capability Issue #5)                    │
├───────────────────────────────────────────────────────── │
│                                                           │
│  • Increase emphasis on homeland defense                  │
│      -- Emerging third-world capabilities and residual    │
│         Russian nuclear capability make this an enduring   │
│         issue                                             │
│      -- Neither BUR nor QDR addressed relative importance  │
│         and risks vis-à-vis conventional warfighting       │
│         capabilities                                      │
│      -- Limited success and high cost of NMD alternatives  │
│         have not helped resolve the issue                  │
│      -- Lack of SecDef/CJCS action leads to congressional  │
│         adjustment of priorities and suboptimization       │
│                                                           │
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Homeland defense is neither a two-MTW nor an SSC issue, but it is of growing concern as monolithic enemies have faded and potentially irrational enemies gain access to new technologies and old nuclear material. DoD does not have primary responsibility for many of the potential concerns, such as counterterrorism and transnational criminal organizations. Such organizations as the Federal Emergency Management Agency (FEMA) have the initial responsibility for coordinating federal and some state support for large-scale contingencies of this type. Additionally, the defense against small numbers of WMD is quite different from our previous concerns about large-scale nuclear attacks. Defenses are possible, but they are not cheap. Previous failures in antiballistic missile programs make it difficult to build consensus on proceeding beyond research and development. The Congress has shown more interest than the Pentagon in accelerating our activities in this area, but the debate is not over.

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│              Evolution of Selected Issues                 │
│                   (Title X Issue #2)                      │
├─────────────────────────────────────────────────────────┤
│                                                           │
│  • Change the active-reserve mix                          │
│       – Emerged as primary Army issue                     │
│       – CORM identified issue but offered no solution.    │
│         BUR created new enhanced Separate Brigades        │
│         (eSBs) in addition to existing Army National      │
│         Guard divisions                                   │
│       – Navy and Marines have relatively small reserve    │
│         forces with only minor resourcing and             │
│         integration issues                                │
│       – Air Force operations are better suited to         │
│         small-unit integration, with a history of         │
│         extensive reliance on Air Force Reserve and       │
│         Air National Guard for operational missions       │
│       – Potential consequences of changes to Army total   │
│         force concept of operation are enormous (bill for │
│         implementing National Guard division redesign for │
│         two divisions is $3–5 billion)                    │
│                                                           │
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The concept of "Total Force," envisioning the effective use of active and reserve component units and individuals, has been a part of defense planning for many years. Its implementation, however, has had mixed success. The Navy and Marine Corps have no National Guard units and relatively small federal Reserve components. And they have had relatively minor problems in equipping and utilizing their Reserves. Both the Army and the Air Force have a federal Reserve and a state-controlled National Guard. The utilization of Air Force and Army reserve components is quite different, in large part because of the difference in their operations. The Air Force can use air crews for short periods of time and can retain personnel whose civilian jobs provide training that maintains skills required for military operations (e.g., airline pilots, aircraft mechanics). Ground operations, on the other hand, require larger units for longer periods of time with more-extensive postmobilization training.

The QDR reviewed the many demands for military capabilities but provided little rationale for a "strategic reserve." This concept of building up large ground forces for sustained land campaigns is a legacy of World War II and Cold War planning. The National Guard divisions, which are currently not included in any CINC war plans, are structured to provide this strategic reserve. The Army plans to convert some of these National Guard combat divisions into combat support (CS) and combat service

support (CSS) units that could be used in SSCs and MTWs, but large political and dollar costs are associated with change. Since total DoD resources are essentially capped for the near future, increasing the utilization of the Army National Guard will come at the expense of resources planned for the active Army.

Infrastructure efficiencies were expected to free resources for modernization and the higher tempo of operations. Because of the success, in the private sector, of reengineering business practices, it was assumed that it would be easy for DoD to mimic their achievements. In fact, outsourcing and privatization had been encouraged by a number of previous defense management reviews. Implementation of change is the real problem. The services and the defense agencies have already implemented the simple changes. Previous rounds of base closings have made the remaining communities with defense bases more politically astute. In particular, the decisions on privatization at the Kelly and McClellan depots have made further reductions problematic.

Because so much money is tied up in the defense infrastructure, future reviews will need to link more clearly the support capabilities provided with the military capabilities that are affected by them. It will no longer be sufficient to address only joint warfighting capabilities. In this area, the primary expertise and responsibilities rest with the services and OSD, but the Joint Staff, in supporting the chairman, must provide a context and supporting analysis for options and decisions.

Evolution of Selected Issues
(Capability Issue #6)

- **Understand PERSTEMPO and OPTEMPO stress points**
  - **Readiness panel and DC games provided many new insights**
  - **Most monitoring information still relates to units and may not reflect the stress on individuals as they move from one unit to another**
  - **Generally acknowledged as a cross-cutting issue that could "break the force" regardless of decisions on modernization infrastructure**

The QDR clearly defined a broader basis for defense planning by addressing the direct and indirect costs of current and planned operations. Our strategy is resulting in new patterns of operations and deployments whose effects on people and equipment are only beginning to emerge. The increased use of certain skill types and equipment to meet current operational demands exceeds planned consumption rates and, thus, is viewed as possibly "breaking the force." For example, the Army's deployment of military police to such areas as Haiti and Bosnia far exceeds the numbers and deployment times planned for. Thus, high utilization of military police in these peacekeeping operations jeopardizes the Army's ability to meet DoD requirements for two near-simultaneous MTWs. One early expectation in the QDR was that savings could be found by adopting new concepts for force readiness. Analysis did not support that hypothesis, and, in the endgame, the QDR increased the allocation to O&S accounts to mitigate some of the apparent problems. Future reviews will require better understanding of the effects of changes in strategy on the people who are required to execute the strategy.

Issue Outcome Analysis

For 366 issues examined in study:
> 77 Resolved (RS)
> 244 Addressed (AD)
> 45 Deferred (DF)

For example:

Develop recommended core military capability with rationale	AD
Identify "unused forces"	AD
Assess capability to fight and win 2 near-simultaneous MTWs	AD
Hedge against emergence of a near-peer competitor	DF
Increase emphasis on defense of homeland	AD
Understand PERSTEMPO and OPTEMPO stress points	AD
Scrutinize Infrastructure	DF
Change active/reserve mix	DF
Increase outsourcing and privatization	DF

However, some issues assessed as Resolved, such as the TACAIR Mix, will continue to be reexamined

In the database of QDR issues (Appendix B), each issue was assigned an outcome category of Resolved (RS), Addressed (AD), and Deferred (DF). *Resolved* means that a QDR decision was associated with the issue. *Addressed* was used for issues for which there was no identifiable decision, even though one or more groups discussed the issue. *Deferred* was used for issues for which a clear decision was made to remove it from the QDR decision set. Even for issues that were categorized as Resolved, many decisions were only interim steps, and the issue can be expected to reemerge in future reviews.

APPENDIX B. QDR ISSUES AND REFERENCES

This research was based in part on analysis of issues extracted from briefings on the QDR prepared by the Joint Staff for meetings among the service chiefs, the CINCs, and the SecDef. A Microsoft Excel database was constructed to link the issues identified in the various briefings with RAND's operationally based framework of CINC missions and institutional functions. The following listing includes the 366 issues identified in the analysis, the file or briefing in which the issue appeared, and its resolution. Issue resolution is coded into three categories:

RS—resolved

AD—addressed in some detail but not resolved

DF—deferred.

Table B.1

QDR Issues

Number	Title	Reference	Resolution
1	Develop recommended core military capability with rationale	09-18 CoordMtg.ppt	AD
2	Describe desired 21st century capabilities	09-30 CJCS.ppt	AD
3	Balance capabilities in context of JV 2010	09-30 CJCS.ppt	AD
4	Identify "unused forces"	09-30 CJCS.ppt	AD
5	Identify requirements for regional engagement	09-30 CJCS.ppt	RS
6	Identify requirements for overseas presence	09-30 CJCS.ppt	RS
7	Identify requirements for small scale contingencies	09-30 CJCS.ppt	RS
8	Identify requirements for lesser regional contingencies	09-30 CJCS.ppt	RS
9	Identify requirements for peace support operations	09-30 CJCS.ppt	RS
10	Define OPTEMPO/PERSTEMPO rules	09-30 CJCS.ppt	RS
11	Describe forces not required for defined operations	09-30 CJCS.ppt	AD
12	Demonstrate linkage of NOW-RC force to strategy	09-30 CJCS.ppt	RS
13	Identify other contributors to NOW-RC force (HNS, coalitions, contractors)	09-30 CJCS.ppt	AD
14	Scrutinize infrastructure	09-30 CJCS.ppt	AD
15	Identify role of reserve components	09-30 CJCS.ppt	AD
16	Define what is infrastructure	09-30 CJCS.ppt	AD
17	Define infrastructure strategic principles	09-30 CJCS.ppt	AD
18	Identify infrastructure to support the NOW-RC	09-30 CJCS.ppt	AD
19	Identify trends in peacetime engagement	10-03 NOWRC_SVC.ppt	RS
20	Identify low-density high-demand (LDHD) forces	10-03 NOWRC_SVC.ppt	RS
21	Examine ability of alternative force structures to execute and sustain flexible and selective engagement	10-03 NOWRC_SVC.ppt	DF
22	Examine requirements for near-peer competitor	10-18 djs.ppt	AD
23	Assess joint capability to fight and win 2 near-simultaneous major regional contingencies	10-18 djs.ppt	AD

Num-ber	Title	Reference	Resolu-tion
24	Examine transition from engagement to MRC	10-18 djs.ppt	AD
25	Examine role of National Guard and Reserve in MOOTW/PKO	10-18 djs.ppt	AD
26	Examine requirement for training readiness of forces engaged in PKO	10-18 djs.ppt	AD
27	Examine requirements for support to NGOs and other government agencies	10-18 djs.ppt	AD
28	Identify when units assigned to MOOTW/PKO can no longer deploy directly to MRC	10-18 djs.ppt	AD
29	Identify missions that can be assigned primary responsibility to RC	10-18 djs.ppt	AD
30	Describe rotation policy for PKO	10-18 djs.ppt	AD
31	Describe acceptable levels of risk	10-18 djs.ppt	AD
32	Identify airlift and sealift requirements for MOOTW and peace operations	10-18 djs.ppt	AD
33	Examine need to revise UCP based on new strategy	10-18 djs.ppt	DF
34	Review manpower and sustainment policies to support > 120 day conflicts	10-18 djs.ppt	AD
35	Examine requirements for forward presence, PREPO, and deployed force	10-18 djs.ppt	RS
36	Examine Non-combatant Evacuation (NEO) requirements	10-18 djs.ppt	RS
37	Examine Peace Operations requirements	10-18 djs.ppt	RS
38	Examine No-Fly Zone/Sanctions Enforcement requirements	10-18 djs.ppt	RS
39	Examine Humanitarian Assistance/Disaster Relief requirements	10-18 djs.ppt	RS
40	Examine Opposed Intervention requirements	10-18 djs.ppt	AD
41	Examine Counter-drug Operations requirements	10-18 djs.ppt	AD
42	Examine Counterproliferation Operations requirements	10-18 djs.ppt	AD
43	Examine implications of level of effort (LOE) for current operations on the All Volunteer Force	10-18 djs.ppt	AD
44	Develop flexible methodology for services to tell BEF story with relative consistency	10-18 djs.ppt	RS

Number	Title	Reference	Resolution
45	Resolve BUR criticism of the assumptions for fighting and winning two near-simultaneous MRCs	10-21 CJCS.ppt	AD
46	Resolve BUR criticism of force levels to carry out two MRC strategy	10-21 CJCS.ppt	AD
47	Resolve BUR criticism of funding proposed for recommended force levels	10-21 CJCS.ppt	AD
48	Conduct an open process for the QDR analysis	10-21 CJCS.ppt	AD
49	Address future (21st century) capabilities	10-21 CJCS.ppt	DF
50	Should we take additional risk now to invest against a more dangerous future	10-29 djstank.ppt	AD
51	Can US alliance leadership be retained with a lower forward deployed presence	10-29 djstank.ppt	AD
52	Need to build the force of the future	11-14 tank.ppt	AD
53	Must work "Revolution in Efficiencies"	11-14 tank.ppt	AD
54	Now is the time to take the risk	11-14 tank.ppt	AD
55	Seek authority to close and realign more bases	11-14 tank.ppt	RS
56	Open more activities to competition and privatization	11-14 tank.ppt	RS
57	Institute additional practices to manage utilization of medical resources and reduce the medical establishment	11-14 tank.ppt	AD
58	Rely on savings from acquisition reform to reduce the cost of modernization plans	11-14 tank.ppt	AD
59	Reduce headquarters, acquisition/S&T/test infrastructure, and other overhead activities	11-14 tank.ppt	AD
60	Adopt radically different business practices for logistics	11-14 tank.ppt	AD
61	Change commitments to, assumptions, and plans for fighting two near-simultaneous MRCs	11-14 tank.ppt	DF
62	Alter posture of forces stationed and deploying overseas	11-14 tank.ppt	DF
63	Size forces for shaping activities and smaller-scale contingencies	11-14 tank.ppt	AD
64	Hedge against emergence of a peer competitor	11-14 tank.ppt	DF
65	Increase emphasis on defense of homeland	11-14 tank.ppt	AD

Num-ber	Title	Reference	Resolu-tion
66	Enhance countermeasures against unconventional warfare (chem/bio/IW)	11-14 tank.ppt	AD
67	Examine need to maintain the major elements of the BUR force structure	11-14 tank.ppt	AD
68	Reduce end strength to reflect operating efficiencies, advanced technologies, and new CONOPs	11-14 tank.ppt	DF
69	Change the active-reserve mix	11-14 tank.ppt	DF
70	Adjust the enabling forces to perform LRCs	11-14 tank.ppt	DF
71	Reconsider Nuclear Posture Review decisions	11-14 tank.ppt	DF
72	Examine need to increase defensive WMD forces (NMD/TMD/CMD, CP)	11-14 tank.ppt	AD
73	Is current level of modernization adequate	11-14 tank.ppt	AD
74	Can infrastructure efficiencies produce savings for modernization	11-14 tank.ppt	DF
75	Shift additional resources to modernization from end strength reductions	11-14 tank.ppt	AD
76	Examine media mix for owned/leased SATCOM & terrestrial communications services	JROC Briefing (Infrastructure)	AD
77	Examine Inventory Simplification for C3	JROC Briefing (Infrastructure)	AD
78	Enhance Electronic Commerce/Electronic Data Interchange (EC/EDI) for improved logistics support	JROC Briefing (Infrastructure)	AD
79	Consolidate DISA Megacenters	JROC Briefing (Infrastructure)	RS
80	Reengineer Security Investigation and Record Management	JROC Briefing (Infrastructure)	AD
81	Implement point-of-use map production	JROC Briefing (Infrastructure)	AD
82	Outsource/Privatize Acquisition Functions	JROC Briefing (Infrastructure)	AD
83	Increase Joint Usage of Ranges	JROC Briefing (Infrastructure)	AD
84	Invest in simulation-based acquisition	JROC Briefing (Infrastructure)	AD
85	Consolidate RDT&E Functions (Vision 21)	JROC Briefing (Infrastructure)	AD
86	Reduce RDT&E & Acquisition Workforce	JROC Briefing (Infrastructure)	RS

Num-ber	Title	Reference	Resolu-tion
87	Impose Medical User Fees for non-active duty	JROC Briefing (Infrastructure)	DF
88	Charge Medical Enrollment Fees for retirees and dependents	JROC Briefing (Infrastructure)	DF
89	Reduce Medical Establishment (MTFs) to the operational mission	JROC Briefing (Infrastructure)	DF
90	Increase Medical Outsourcing	JROC Briefing (Infrastructure)	DF
91	Obtain Medicare Reimbursement	JROC Briefing (Infrastructure)	AD
92	Level medical grade structure	JROC Briefing (Infrastructure)	AD
93	Conduct additional BRAC rounds	JROC Briefing (Infrastructure)	AD
94	Perform More Installation Support Outsourcing	JROC Briefing (Infrastructure)	RS
95	Implement More Installation Support Management Efficiencies	JROC Briefing (Infrastructure)	RS
96	Recapitalize facilities	JROC Briefing (Infrastructure)	AD
97	Defer Environmental Compliance Spending	JROC Briefing (Infrastructure)	AD
98	Increase logistics outsourcing and privatization (13 issues)	JROC Briefing (Infrastructure)	RS
99	Reduce life cycle costs (3 issues)	JROC Briefing (Infrastructure)	AD
100	Increase technology insertion (8 issues)	JROC Briefing (Infrastructure)	AD
101	Reengineer logistics business processes (28 issues)	JROC Briefing (Infrastructure)	AD
102	Budget for risks in acquisition programs	JROC Briefing (Infrastructure)	RS
103	Examine TACAIR modernization program alternatives	JROC Briefing (Modernization)	RS
104	Develop an information assurance strategy	JROC Briefing (Modernization)	AD
105	Ensure availability of precision position, velocity, and timing (PV&T) information	JROC Briefing (Modernization)	AD
106	Determine the peacetime demand for forces	JROC Briefing (Readiness)	RS
107	Understand PERSTEMPO and OPSTEMPO stress points	JROC Briefing (Readiness)	AD

Num-ber	Title	Reference	Resolu-tion
108	Examine innovative training concepts to reduce cost of maintaining readiness	JROC Briefing (Readiness)	AD
109	Assess operational medical readiness requirements	JROC Briefing (Readiness)	AD
110	Examine impact of tiered readiness	JROC Briefing (Readiness)	RS
111	Define readiness for asymmetric threats (e.g., WMD or terrorism)	JROC Briefing (Readiness)	AD
112	Streamline and consolidate training infrastructure	JROC Briefing (Readiness)	AD
113	Improve readiness assessment system	JROC Briefing (Readiness)	RS
114	Increase use of embedded training and simulators	JROC Briefing (Readiness)	AD
115	Develop joint training initiatives	JROC Briefing (Readiness)	AD
116	Implement 8th QRMC	JROC Briefing (Human Resources)	AD
117	Reassess Subsistence Allowance	JROC Briefing (Human Resources)	DF
118	Reform Housing Allowance	JROC Briefing (Human Resources)	DF
119	Reduce PCS Costs	JROC Briefing (Human Resources)	AD
120	Recruiting Consolidation (AC/RC)	JROC Briefing (Human Resources)	AD
121	Title 5 to 10(?)	JROC Briefing (Human Resources)	AD
122	Review Civilian Pay, Benefits, and Entitlements	JROC Briefing (Human Resources)	AD
123	Improved Civilian Personnel Processes	JROC Briefing (Human Resources)	AD
124	Civilian Personnel Reshaping Initiatives	JROC Briefing (Human Resources)	AD
125	Quality of Life & Community Support Overhead	JROC Briefing (Human Resources)	AD
126	Quality of Life & Community Support Outsourcing Opportunities	JROC Briefing (Human Resources)	AD
127	Military/Civilian Infrastructure Manpower Mix	JROC Briefing (Human Resources)	DF
128	Other Organization/Structure Infrastructure Manpower Mix Issues	JROC Briefing (Human Resources)	DF

Num-ber	Title	Reference	Resolu-tion
129	Assess Shaping Requirements	JROC Briefing (Force Structure)	RS
130	Assess Respond Requirements	JROC Briefing (Force Structure)	RS
131	Assess Prepare Requirements	JROC Briefing (Force Structure)	AD
132	Assess Force Alternatives	JROC Briefing (Force Structure)	AD
133	Develop TACAIR Modernization Alternatives	JROC Briefing (Modernization)	RS
134	SBIRS-Low w/o NMD Deployment	JROC Briefing (Modernization)	AD
135	Develop an Information Assurance Strategy	JROC Briefing (Modernization)	AD
136	PV&T Information Protection	JROC Briefing (Modernization)	AD
137	Develop Anti-Armor Program Alternatives	JROC Briefing (Modernization)	AD
138	Review Rotary Wing Aircraft Modernization	JROC Briefing (Modernization)	AD
139	Examine Deep Strike Weapons Mix	JROC Briefing (Modernization)	AD
140	Develop C4ISR Investment Strategy	JROC Briefing (Modernization)	AD
141	Examine TAMD Architecture Alternatives	JROC Briefing (Modernization)	RS
142	Examine SOF Modernization Alternatives	JROC Briefing (Modernization)	AD
143	Examine Ship Modernization	JROC Briefing (Modernization)	RS
144	Examine Strategic Force Modernization Alternatives	JROC Briefing (Modernization)	DF
145	Examine Ground Force Modernization Alternatives	JROC Briefing (Modernization)	DF
146	Impact of multiple, rapid-response lift requirements on closure times	DC4 Outbrief	AD
147	Need for priority in peacetime PREPO reconstitution	DC4 Outbrief	AD
148	Need to examine follow-on operations	DC4 Outbrief	AD
149	Impact of sequential deployments on all-volunteer force	DC4 Outbrief	AD

Num-ber	Title	Reference	Resolu-tion
150	Need to account for PSRC processing time in RC support	DC4 Outbrief	RS
151	Political necessity for more routine/readily achievable access	DC4 Outbrief	AD
152	Increased political/military risks associated with gaps in forward presence coverage	DC4 Outbrief	AD
153	Need to review GMFP, JSCP, and Forward Presence requirements in conjunction with any substantial force cuts	DC4 Outbrief	AD
154	Need to consider protracted withdrawal sequences from SSCs	DC4 Outbrief	AD
155	Service specific approaches to readiness are about right	DC4 Outbrief	RS
156	Significant OPTEMPO savings only attainable if strategy requirements change	DC4 Outbrief	RS
157	Ability of Alternative Force Structures to meet overall strategy requirements and assessment of associated risk	DC4 Outbrief	AD
158	Increase high demand capabilities for SSCs	DC4 Outbrief	AD
159	Need to adjust AC/RC mix in select areas	DC4 Outbrief	AD
160	Need for in-place and/or accessible inventories	DC4 Outbrief	AD
161	Need to manage hazardous materials identification, collection, and disposal	DC4 Outbrief	AD
162	Need to consider maintenance impact on equipment of repeated commitment to LRCs	DC4 Outbrief	AD
163	Decreasing forces may increase requirement for strategic lift	DC4 Outbrief	AD
164	Fundamental assumptions of MRS BURU analysis have changed with new strategy	DC4 Outbrief	AD
165	Examine Wartime Executive Agent Requirements (WEAR)	DC4 Outbrief	AD
166	Need to consider harbor defense and port security operations	DC4 Outbrief	AD
167	Forward basing provides responsive capability while reducing PERSTEMPO, OPTEMPO, etc.	DC4 Outbrief	AD
168	Need to better understand Chemical and Biological impacts	DC4 Outbrief	AD
169	Need to examine asymmetrical threats in SSCs	DC4 Service IPR	DF

Num-ber	Title	Reference	Resolu-tion
170	Added U.S. costs for coalition operations	DC4 Service IPR	AD
171	Force protection concerns enhance value of "over-the-horizon" or standoff forces	DC4 Service IPR	AD
172	Current force structure is fragile	DC4 Service IPR	AD
173	Fund contingencies to reduce migration of modernization funds	Emerging Assessment	DF
174	Examine requirements for reconstitution and post-conflict operations	Emerging Assessment	AD
175	Examine CINC timelines for MTW from posture of SSC engagement	Emerging Assessment	AD
176	Consider "Global Souring" of global requirements	Emerging Assessment	AD
177	Develop assessment process to evaluate risk to MTW capability within crisis decision cycle	Emerging Assessment	DF
178	Establish pre-planning of lift, retraining, maintenance for transition from SSCs to MTWs	Emerging Assessment	DF
179	Analyze cumulative effects of repeated reserve mobilizations	Emerging Assessment	DF
180	US responses to WMD will be precedent setting	Emerging Assessment	DF
181	Examine plans for redeployment of contaminated equipment	Emerging Assessment	DF
182	Develop new tools to assess LRC/SSC requirements	Emerging Assessment	AD
183	Incorporate LRC/SSC requirements into DoD planning process	Emerging Assessment	AD
184	Include non-DoD participants in LRC/SSC to increase success	Emerging Assessment	AD
185	Improve reporting and understanding of PERSTEMPO	Emerging Assessment	RS
186	Understand limitations of technology enablers when applied to MOUT	Emerging Assessment	DF
187	Reduction or elimination of Air Defense Force	Emerging Assessment	RS
188	Understand nature of IW threat to US homeland	Emerging Assessment	DF
189	Examine advisability of further readiness adjustments in light of the strategy demands and force characteristics	Emerging Readiness Briefing	RS

Table B.1—Continued

Number	Title	Reference	Resolution
190	Liabilities of tiered readiness outweigh potential savings	Emerging Readiness Briefing	RS
191	Develop Global Military Force Policy (GMFP) for allocation of LDHD assets	Emerging Readiness Briefing	RS
192	Reducing CJCS CINC exercise program	Emerging Readiness Briefing	RS
193	Reducing Service Title 10 man-days	Emerging Readiness Briefing	DF
194	Reduce O&S costs by inserting technology and new processes to improve Reliability, Maintainability, and Supportability (RMS) of fielded systems and new systems	Infra_draft.doc	AD
195	Reduce costs by outsourcing/privatizing acquisition support functions	Infra_draft.doc	AD
196	Reduce costs by consolidating and outsourcing (DISA?) megacenters	Infra_draft.doc	RS
197	Reduce costs by regionalization of below wholesale logistics support	Infra_draft.doc	AD
198	Reduce infrastructure costs by maintenance process improvements (eliminate excess capacity, collapse levels of maintenance, etc.)	Infra_draft.doc	AD
199	Reduce infrastructure costs by materiel management process improvements (reduce inventory through consumption and not replacing, TAV, etc.)	Infra_draft.doc	AD
200	Reduce infrastructure costs by reengineering cataloging, disposal, and physical distribution activities	Infra_draft.doc	AD
201	Reduce infrastructure costs by consolidation of inventory control points	Infra_draft.doc	DF
202	Reduce infrastructure costs through reengineering and streamlining the Defense Transportation System (streamline TRANSCOM headquarters, outsource HHG movement)	Infra_draft.doc	AD
203	Reduce infrastructure costs by reengineering Defense Finance and Accounting Service (DFAS)	Infra_draft.doc	AD

Num- ber	Title	Reference	Resolu -tion
204	Reduce infrastructure costs by reengineering DoD commissaries and exchanges	Infra_draft.doc	AD
205	Reduce infrastructure costs by imposing enrollment fees for retirees and their dependents	Infra_draft.doc	DF
206	Reduce the medical establishment to the operational mission	Infra_draft.doc	DF
207	Reduce infrastructure costs through increased outsourcing in the Defense Health Program	Infra_draft.doc	AD
208	Reduce infrastructure costs by consolidating, reengineering, and outsourcing Defense Agency/Defense Wide (DA/DW) functions	Infra_draft.doc	AD
209	Reduce infrastructure costs by outsourcing and relocating selective recruiting functions	Infra_draft.doc	AD
210	Reduce infrastructure costs by outsourcing and increased use of training technology	Infra_draft.doc	AD
211	Reduce infrastructure costs by streamlining the disability evaluation system	Infra_draft.doc	AD
212	Share Military Retirement Fund (MRF) gains and losses	Infra_draft.doc	DF
213	Eliminate Social Security Military Wage Credit	Infra_draft.doc	DF
214	Restore unemployment compensation benefits	Infra_draft.doc	DF
215	Substantial overseas presence and peacetime engagement	IntegratedOptions.ppt	AD
216	Credible conventional and nuclear deterrence	IntegratedOptions.ppt	AD
217	Multiple smaller-scale contingencies (SSCs)	IntegratedOptions.ppt	AD
218	Overlapping wars in 2 theaters	IntegratedOptions.ppt	AD
219	Exploiting revolutions in military and business affairs	IntegratedOptions.ppt	AD
220	Developing technologies and forces to meet potential future challenges	IntegratedOptions.ppt	AD
221	Stem O&S Migration	IntegratedOptions.ppt	AD
222	Build a stable, sustainable modernization program which supports the strategy	IntegratedOptions.ppt	AD

Num-ber	Title	Reference	Resolu-tion
223	Address prospect of near-peer competitor around 2010	IntegratedOptions.ppt	DF
224	Identify acceptable risk in meeting near- and mid-term demands to fund modernization	IntegratedOptions.ppt	AD
225	Reduce unneeded base capacity (BRAC)	Issue2.doc	AD
226	Expand and accelerate outsourcing and privatization of mission support and community support functions	Issue3.doc	AD
227	Identify additional management efficiencies, such as regionalization and activity-based costing, to reduce installation support requirements	Issue4.doc	AD
228	Examine opportunities to reduce facilities repair and modernization requirements	Issue5.doc	AD
229	Examine opportunities to reduce environmental cleanup requirements	Issue6.doc	AD
230	Streamline active support to reserve training	SecDef Saturday 1	AD
231	Reduce size of combat support hospitals	SecDef Saturday 1	DF
232	Eliminate last to deploy CS/CSS units	SecDef Saturday 1	DF
233	Return USARSO from Panama	SecDef Saturday 1	RS
234	Reduce and eliminate active duty infrastructure support	SecDef Saturday 1	AD
235	Outsource headquarters, base, and logistics support activities	SecDef Saturday 1	AD
236	Streamline Army Material Command	SecDef Saturday 1	AD
237	Reduce Army RC by 45,000	SecDef Saturday 1	RS
238	Consolidation of bomber, fighter, and other aircraft squadrons	SecDef Saturday 1	RS
239	Change one fighter wing from Active to Reserve	SecDef Saturday 1	RS
240	Eliminate x numbered Air Forces	SecDef Saturday 1	RS
241	Outsource headquarters, base, and logistics support activities	SecDef Saturday 1	AD
242	Reduce JSTARS procurement	SecDef Saturday 1	RS
243	Adjust Global Hawk procurement	SecDef Saturday 1	RS
244	Reduce Navy force structure	SecDef Saturday 1	RS
245	Transfer auxiliary ships to MSC	SecDef Saturday 1	RS
246	Reduce depot and intermediate maintenance capacity	SecDef Saturday 1	AD
247	Reduce logistics and technical support	SecDef Saturday 1	AD

Num-ber	Title	Reference	Resolu-tion
248	Reduce Marine CONUS security support to Navy	SecDef Saturday 1	RS
249	Reduce Navy and Marine Corps Reserve Components	SecDef Saturday 1	RS
250	FYDP O&S Migration	SecDef Saturday 1	AD
251	Post-FYDP Modernization Bow Wave	SecDef Saturday 1	DF
252	Funding NMD and TMD increases	SecDef Saturday 1	RS
253	Funding NATO Enlargement	SecDef Saturday 1	AD
254	Medical Cost Growth	SecDef Saturday 1	DF
255	Insufficient Outyear Funding for contingencies	SecDef Saturday 1	DF
256	Insufficient Minor Procurement Funding	SecDef Saturday 1	DF
257	Mitigate effects of Chemical and Biological Weapons	SecDef Saturday 2	AD
258	Impact of additional B-2s	SecDef Saturday 2	RS
259	Balanced reduction in TACAIR modernization	SecDef Saturday 2	RS
260	Restructure THAAD program	SecDef Saturday 2	RS
261	Accelerate NMD	SecDef Saturday 2	RS
262	Restructure V-22 procurement	SecDef Saturday 2	RS
263	Restructure Army modernization	SecDef Saturday 2	AD
264	Reduce joint exercises	SecDef Saturday 2	RS
265	Align all AC and RC units with QDR missions	SecDef Saturday 2	DF
266	Reduce DA/DW DWCF expenditures	SecDef Saturday 2	AD
267	Increase Navy Theater-wide TMD	SecDef Saturday 3	RS
268	Program Procurement Risk Reserves	SecDef Saturday 3	RS
269	Reduce infrastructure capacity through two additional BRAC rounds	SecDef Saturday 3	AD
270	Seek legislative relief to increase private depot maintenance	SecDef Saturday 3	AD
271	Seek legislative relief to increase outsourcing	SecDef Saturday 3	AD
272	Seek legislative relief on civilian personnel	SecDef Saturday 3	AD
273	Execute two near-simultaneous major theater wars with moderate risk	QDR Report	RS
274	Ensure that U.S. forces can transition from smaller-scale deployments and operations to major theater wars	QDR Report	AD

Table B.1—Continued

Num-ber	Title	Reference	Resolu-tion
275	Increase investment in capabilities to prevent and defend against the use of chemical and biological weapons	QDR Report	AD
276	Provide substantial levels of peacetime engagement	QDR Report	RS
277	Sustain peacetime engagement within acceptable personnel tempo levels	QDR Report	AD
278	Provide sufficient flexibility to conduct a wide range of exercises and training missions with allies and friends	QDR Report	AD
279	Maintain flexibility to temporarily increase overseas deployments	QDR Report	AD
280	Respond across the full spectrum of crises—deterring aggression and coercion in crises, conducting smaller-scale contingency operations, and fighting and winning MTWs	QDR Report	AD
281	Achieve battlefield dominance with smaller overall forces, improving our capabilities to respond	QDR Report	AD
282	Focus modernization effort to exploit the Revolution in Military Affairs	QDR Report	AD
283	Create large-scale investment opportunities to modernize and transform the force for tomorrow	QDR Report	AD
284	Aggressively transform the force to meet new, potentially more demanding challenges	QDR Report	AD
285	Introduce new systems and technologies at a reasonably aggressive rate	QDR Report	AD
286	Attain the long-term benefits of an increased modernization program while minimizing the near-term risk of reducing combat forces	QDR Report	AD
287	Conduct a wide range of smaller-scale contingency operations	QDR Report	RS
288	Redeploy from smaller-scale contingency operations to MTW	QDR Report	AD
289	Swing specialized, high leverage units from one theater of conflict to another	QDR Report	AD

Num-ber	Title	Reference	Resolu-tion
290	Maintain afloat prepositioned cargo capacity and a complementary land-based prepositioning program.	QDR Report	RS
291	Ensure that the demands of ongoing operations are sustainable over the long haul without overstressing our people	QDR Report	AD
292	Share the burdens of response among the forces deployed in all theaters	QDR Report	AD
293	Allocate low density/high demand assets across competing priorities	QDR Report	AD
294	Strive to attract and maintain the quality force of today's all-volunteer military	QDR Report	AD
295	Provide military personnel with a quality of life commensurate with the sacrifices they make	QDR Report	AD
296	Provide adequate pay raises	QDR Report	AD
297	Provide adequate funding for housing, community and family support, and transition assistance	QDR Report	AD
298	Provide educational assistance	QDR Report	AD
299	Develop the improved information and command and control capabilities needed to significantly enhance joint operations	QDR Report	AD
300	Respond rapidly to any conflict	QDR Report	AD
301	Position and employ widely dispersed joint air, land, sea, and space forces	QDR Report	RS
302	Increase mobility and lethality	QDR Report	AD
303	Rapidly assess the results of engagement and reengage with precision when required	QDR Report	AD
304	Increase the precision of infantry weapons and improve field equipment	QDR Report	AD
305	Maintain freedom of action during deployment, maneuver, and engagement	QDR Report	AD
306	Develop and deploy a multitiered theater air and missile defense architecture	QDR Report	AD
307	Provide boost phase interception capability	QDR Report	AD
308	Improve protection against chemical and biological weapons threats	QDR Report	AD
309	Develop state of the art logistics practices and doctrine	QDR Report	AD

Num-ber	Title	Reference	Resolu-tion
310	Provide more, agile, leaner combat forces that can be rapidly deployed and sustained around the globe	QDR Report	AD
311	Ensure freedom of strategic and operational maneuver	QDR Report	AD
312	Attack rapidly anywhere	QDR Report	AD
313	Project power from sea to land	QDR Report	AD
314	Establish forward naval presence	QDR Report	AD
315	Control the sea to achieve maritime supremacy	QDR Report	AD
316	Rapidly reorganize and reorient across a broad range of new tasks and missions in fluid operational environments	QDR Report	AD
317	Project power ashore ...disaster relief to high-intensity combat	QDR Report	AD
318	Provide on-demand radar imagery anywhere and in near real-time to the theater commander	QDR Report	AD
319	Evolve toward more interoperable battle management systems (GCCS)	QDR Report	RS
320	Achieve information superiority	QDR Report	AD
321	Move information in a timely manner to the lowest tactical levels	QDR Report	AD
322	Provide radar data on fixed and moving targets from an airborne battle management platform	QDR Report	RS
323	Maintain substantial air-to-ground capability	QDR Report	RS
324	Develop a family of common aircraft for use by land- and sea-based aviation forces	QDR Report	AD
325	Replace the Marine Corps' aging fleet of Vietnam-era lift helicopters	QDR Report	RS
326	Halt an adversary's advance during the opening days of a major theater war	QDR Report	RS
327	Establish superior precision engagement capability against projected threats	QDR Report	RS
328	Increase the survivability and lethality of our forces	QDR Report	RS
329	Maintain a balanced approach for the "close battle"	QDR Report	AD

Table B.1—Continued

Num-ber	Title	Reference	Resolu-tion
330	Ensure the U.S. retains the ability to control the seas and project power ashore in peacetime and across the broad spectrum of contingencies	QDR Report	RS
331	Accelerate the fielding of a digitized (Force XXI) corps	QDR Report	AD
332	Enable commanders, planners, and shooters to rapidly acquire and share information	QDR Report	AD
333	Convert lower priority combat brigades into higher priority CS/CSS forces	QDR Report	RS
334	Increase capability in attack operations to address theater ballistic missile and cruise missile threats prior to launch	QDR Report	AD
335	Provide protection against a limited ballistic missile attack	QDR Report	AD
336	Increase emphasis on national cruise missile defense	QDR Report	AD
337	Respond effectively in time of crisis to facilitate our participation in the GATM system and other navigational and safety efforts	QDR Report	AD
338	Pursue the protection of our access to GPS positional information in the face of potential enemy electronic jamming and the ability to deny enemy use of GPS	QDR Report	AD
339	Institutionalize counterproliferation as an organizing principle in every facet of military activity	QDR Report	AD
340	Institutionalize CP efforts to encourage allies and potential coalition partners to train, equip, and prepare their forces	QDR Report	AD
341	Develop an integrated counter-NBC weapons strategy that includes both offensive and defensive measures	QDR Report	AD
342	Deploy or pre-position NBC defense and theater missile-defense capabilities and personnel into theaters of operations	QDR Report	AD
343	Deploy capability to defeat hard and/or deeply buried targets	QDR Report	AD
344	Increase funding for SOF CP activities	QDR Report	AD
345	Increase combined readiness	QDR Report	AD

Num-ber	Title	Reference	Resolu-tion
346	Reduce American vulnerability to terrorist attacks	QDR Report	AD
347	Enhance both antiterrorism and counterterrorism capabilities	QDR Report	AD
348	Improve the Chemical/Biological Incident Response Force	QDR Report	AD
349	Reassess the vulnerability of DoD facilities at home and abroad	QDR Report	AD
350	Improve sensitive counterrorism training and technologies	QDR Report	AD
351	Protect critical U.S. infrastructure against hostile information operations	QDR Report	AD
352	Develop U.S. information operation capabilities for use in peacetime engagement, SSCs and MTWs	QDR Report	AD
353	Integrate information operations concepts into military-planning, programming, budgeting and operations	QDR Report	AD
354	Rapidly move and concentrate U.S. power in distant corners of the globe	QDR Report	AD
355	Fight our way into a denied theater	QDR Report	AD
356	Provide early strategic warning of crises	QDR Report	AD
357	Detect threats in an environment complicated by more actors and more sophisticated technology	QDR Report	AD
358	Expand the flow of intelligence information to all echelons of the battlefield	QDR Report	AD
359	Deliver large quantities of information selectively to tactical commanders	QDR Report	AD
360	Negate an adversary's ability to interfere in our information operations	QDR Report	AD
361	Retain superiority in space	QDR Report	AD
362	Monitor foreign use of space assets	QDR Report	AD
363	Develop the capabilities to protect our (space) systems	QDR Report	AD
364	Prevent hostile use of space by an adversary	QDR Report	AD
365	Maintain a robust and effective strategic lift capability	QDR Report	AD
366	Maintain sufficient domestic and en route support infrastructure	QDR Report	AD

REFERENCES

"The Army's Civil War," *Armed Forces Journal International*, September 1997, p. 66.

Aspin, Les, Secretary of Defense, *Report on the Bottom-Up Review*, Department of Defense, October 1993.

Cohen, William, *Report of the Quadrennial Defense Review*, Washington, D.C., May 1997.

"Defense Budget Faces Squeeze in 1997, Head of House Panel Says," *The Wall Street Journal*, November 14, 1996, Section A, p. 4.

Defense Science Board, "Achieving an Innovative Support Structure for 21st Century Military Superiority: Higher Performance at Lower Costs," Washington, D.C., November 1996.

Department of Defense, "Defense Acquisition," DoD Directive 5000.1, March 15, 1996.

_____, "Functions of the Department of Defense and Its Major Components," DoD Directive 5100.1 September 25, 1987.

GAO—*see* U.S. General Accounting Office.

Joint Staff, "QDR and AFSA," internal briefing, July 15, 1996.

_____, "No Title," (U) internal briefing, August 15, 1996.

_____, "QDR—A Way Ahead," (U) internal briefing, September 19, 1996.

_____, "CJCS Update Briefing," (U) internal briefing, September 30, 1996.

_____, "Getting at the NOW RC," (U) internal briefing, October 3, 1996

_____, "Getting at the NOW RC," (U) internal briefing, October 7, 1996

_____, "QDR Implementation Strategy," (U) internal briefing, October 18, 1996.

_____, "CJCS Update," (U) internal briefing, October 21, 1996.

_____, "QDR 'What is your guidance?' " (U) internal briefing, October 29, 1996.

_____, "Last Meeting's Consensus," (U) internal briefing, November 14, 1996.

_____, "No Title," (U) internal briefing, January 13, 1997.

_____, "More BRAC?," (U) internal briefing, February 24, 1997.

_____, "More Outsourcing and Privatization," (U) internal briefing, February 24, 1997.

_____, "Additional Management Efficiencies," (U) internal briefing, February 24, 1997.

_____, "Facility Recapitalization," (U) internal briefing, February 24, 1997.

_____, "Environment," (U) internal briefing, February 24, 1997.

_____, "QDR 'Preparing Now'," (U) internal briefing, March 27, 1997.

_____, "U.S. Defense Strategy," (U) internal briefing, April 15, 1997.

_____, "Marine Corps Assessment," (U) internal briefing, April 15, 1997.

_____, "SOF Assessment," April 18, 1997.

_____, "Additional Assessments of Maritime Forces," (U) internal briefing, April 19, 1997.

_____, "Air Force Additional Assessment," (U) internal briefing, April 19, 1997.

_____,, "Army National Guard Issues," (U) internal briefing, April 25, 1997.

_____, "Revolution in Business Affairs," (U) internal briefing, April 30, 1997.

_____, "Readiness," (U) internal briefing, May 1, 1997.

_____, "CINC's Conference QDR Update—Force Assessment," (U) internal briefing, May 1, 1997.

_____, "CINC's Conference QDR Update—Integrated Options Framework," (U) internal briefing, May 1, 1997.

_____, "No Title," (U) internal briefing, May 5, 1997.

_____, "QDR," (U) internal briefing, May 7, 1997.

_____, "Readiness," (U) internal briefing, May 8, 1997.

_____, "Baseline Engagement Force," (U) QDR decision briefing, February 18, 1997, PD-FOUO.

_____, "Dynamic Commitment 4 Game," (U) QDR decision briefing, March 22, 1997, Secret.

_____, "Campaign Analysis for 2 MTWs," (U) QDR decision briefing, April 1, 1997, Secret.

_____, "Dynamic Commitment," (U) QDR decision briefing, April 7, 1997, Secret.

_____, "U.S. Defense Strategy April 1997," (U) QDR decision briefing, April 7, 1997, Secret.

_____, "QDR—8 April 1997," (U) QDR decision briefing, April 8, 1997, Secret.

_____, "Dynamic Commitment Service IPR," (U) QDR decision briefing, April 9, 1997, Secret.

_____, "Readiness," (U) QDR decision briefing, April 15, 1997, Secret.

Kitfield, James, "The Air Force Wants to Spread Its Wings," *National Journal*, November 8, 1997, p. 2264.

Lewis, Leslie, John Y. Schrader, William Schwabe, and Roger Brown, *Joint Warfighting Capability (JWCA) Integration: Report on Phase 1 Research*, Santa Monica, Calif.: RAND, DRR(L)-1429-1-JS, 1996.

Lewis, Leslie, C. Robert Roll, and John D. Mayer, *Assessing the Structure and Mix of Future Active and Reserve Forces: Assessment of Policies and Practices for Implementing the Total Force Policy*, Santa Monica, Calif.: RAND, MR-133-OSD, 1992.

McCain, John (U.S. Senator, R-AZ), Ready Tomorrow: Defending American Interests in the 21st Century, white paper, March 19, 1996.

Office of the Secretary of Defense, "QDR Decisions—first set," (U) QDR decision briefing, April 26, 1997, Secret.

_____, "QDR Decisions—second set," (U) QDR decision briefing, May 3, 1997, Secret.

_____, "QDR Decisions—final set," (U) QDR decision briefing, May 9, 1997, PD FOUO.

Pirnie, Bruce and Sam B. Gardiner, *An Objectives-Based Approach to Military Campaign Analysis*, Santa Monica, Calif.: RAND, MR-656-JS, 1996.

Schwabe, William, Leslie Lewis, and John Schrader, *Analytic Architecture for Joint Staff Decision Support Activities: Final Report*, Santa Monica, Calif.: RAND, MR-651-JS, 1996.

Shalikashvili, Gen John M., "National Military Strategy: Shape, Respond, Prepare Now: A Military Strategy for a New Era," 1997, pp. 16–17.

U.S. Congress, House of Representatives, *National Defense Authorization Act for Fiscal Year 1997: Conference Report to Accompany H.R. 3230*, Subtitle B—Force Structure, 104th Cong., 2d sess., H. Rept. 104-724, 1996.

U.S. General Accounting Office, *Bottom-Up Review: Analysis of DOD War Game to Test Key Assumptions*, GAO/NSIAD-96-170, June 1996.